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## Marriage After Forty\*

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■ MAN, in primitive life, chose a mate because of his instinctive urge to reproduce his kind. Love did not become an important factor in his life until civilization had developed his understanding of law and order, and had taught him that his innate right to possess a woman was based upon moral, religious and sociological principles that exist today as the most adamant of our whole fundamental structure.

As civilization advanced divorce and re-marriage became known. Statistics show that successful marriages are those that go beyond the age of forty. But after forty is the time when the most serious crashes in matrimonial life occur. By this time children have been brought into the world, the family has grown, the economic foundation has been established and the physical attraction between man and wife has reached its zenith. A break in marriage at this time would be a most serious incident in the life cycle of the married couple.

Most of us look at marriage through a misty haze of poetical and romantic language. We expect it to be the fulfillment of desire, joy, love

and life. The foundation of happiness and of health is made in the first months of marriage, and the years that follow are colored by those early days—most momentous to the man and highly fascinating to the woman. When toleration supplants coöperation love dies and marriage is little more than misapprehension, disillusionment and alienation.

There is a time in the lives of most married people when a domestic disagreement may occur. It may be only a trivial tiff which readily corrects itself, or it may take on serious proportions which threaten to disrupt what has heretofore been a happy union. Several factors are concerned—moral, economic, jealousy, outside interference, sexual maladjustment, and a variety of other causes.

The duration of marriage and the presence of children are important considerations in marital conflicts. In marriages of short duration a large percentage of disagreements arise from failure of the partners to understand each other. The marriage is not old enough for each to have become thoroughly acquainted with the other.

After forty, when married couples are expected to have mature marital judgment another factor comes into their lives. At this time Mother Nature begins to play a trick on man and woman. An era is entered when certain physical and emotional changes take place. The success and happiness of married people after forty depend chiefly upon an intimate knowledge and an understanding of these changes.

So insidiously does this change creep upon the man that the woman may not recognize it and therefore fails to understand his changing nature. In the case of the wife the signs of the change are more abrupt and noticeable, although the degree in which they occur may vary.

In order to understand more thoroughly the changing natures of man and woman after forty,

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we should know something of their normal natures in earlier life.

#### Nature of Man

Ages ago, man lived in trees, caves and as a nomad following his flocks. Today he has developed new physical structures, new ways of living and emotional responses that are representative of the cumulative experiences of mankind. But it is only in the last half century that he has seriously begun the study of his emotional life.

Man's instinct of reproduction, of which all normal men are aware, is foremost in his life. Quite often, it exists independent of love with its associated feelings of sympathy, understanding, and companionship. These instincts and feelings, in a normal healthy man, may not be centered on the same woman. A man may love a woman and not be physically attracted to her; or he may have a strong physical attraction to another woman whom he does not love.

A marriage in which the man does not have love and strong physical attraction toward his wife is usually unsuccessful. If he does not have this attraction before he marries her, he is not likely to acquire it afterward and such a marriage is almost certain to be a failure. This instinct in man is natural and women should realize the importance of treating its first manifestations with broad understanding.

The sex coefficient varies in man. Naturally, he is aggressive, impatient, quickly aroused and at times misunderstanding and inconsiderate in his sexual demands. He may lack control of his sexual urges, be unreasonable, and his sexual ethics may even be crude and repulsive.

#### Nature of Woman

Before the dawn of civilization, woman had no other purpose on this earth except to be the mate of man and to bear his offspring. Because of the long period of gestation and dependence of the child upon its mother, woman was incapacitated and needed protection of man if she and her young were to survive. As a result of her dependence on man, she fell under his domination to such an extent that her primary sexual impulses were obscured. But when social behavior became known, her life was controlled by man-

ners, morals and customs. She contended for release from male domination and after centuries, man conceded to her demands.

Accepting the scriptural span of life as three score and ten years, a woman's life may be divided into three distinct periods: the period of immaturity, or the "Age of Innocence"; the period of sexual activity, which is biologically the most important but not often the happiest portion of a woman's existence; and the period of menopausal life, when the organs of reproduction cease their activity and the ability to bear children comes to an end.

In the period of sexual activity, woman's sexual needs and responses are not identical with man's. Mating comes to her as a response to a general harmonious feeling of well-being, rather than as a result of a specific erotic stimulation. Man cannot expect to find in the normal woman the same frequent, intense urge that he experiences. Since monogamy is the standard set by our social structure, he must recognize sexual differences. He must learn that her sex life is a more diffuse part of her nature. Sexual desire in woman is largely mental and to a great extent stirred by the feeling of love for her husband.

#### Man and Woman During the Climacterium

We hear much of the "Dangerous Forties," the period of change in the lives of man and woman, or what is termed scientifically the climacterium. That such a period exists in the life of woman has long been known, but Maranon was the first to point out the evidence of a male climacterium, the symptoms of which closely parallel the non-menstrual manifestations in woman.

The climacterium has a different effect upon each physically, but in both there is a state of mental unrest, emotionalism, tendency to gloominess, apprehensiveness, irritability, and even insanity. Suicide is not infrequent, particularly in males. There is a change of sex inclinations usually shown by a decline in sex activity, and it may be lacking entirely. In some cases it becomes excessive and leads to social complications.

In women, seventy-five per cent suffer from distressing symptoms during the climacterium. In addition to the abrupt cessation of menstruation certain nervous disturbances occur. The most frequent of these consist of irritable temper, excitability, hysteria, fatigue, insomnia, depres-

sion and crying, fear and anxiety, forgetfulness and loss of memory. The mental state should be carefully observed, as melancholia and other forms of insanity may develop at this period in woman with a hereditary taint or neurotic tendency. Other symptoms such as flushes and chills, palpitation and rapid heart, difficult respiration, neuralgia in various parts of the body, burning sensations, headaches, and frigidity may also be present. Occasionally, the sexual appetite increases and some women with little previous desire suddenly develop a passionate nature, but usually sexual reserve is an outstanding feature.

In man, the appearance and symptoms of the change come gradually and insidiously. There is nervous imbalance, his judgment may be affected and he is easily led from the straight and narrow path of discretion. His whole endocrine system is affected. He has inherited the nature of his cave-man ancestors and may fail to understand the trick that Nature is playing. Sometimes he regards his decline in sexual function as cause for a shift in his sexual attentions, so he lets himself be attracted to other fields of indulgence—drinking, gambling, women. At once he arouses the ire of his mate, quarrels ensue, and usually the final result is—mutiny in the home.

A wife usually re-acts to her husband's "change of life" by becoming suspicious of him, loses confidence in him, is antagonistic and misunderstanding. She does not understand his sudden loss of interest in her and is surprised that she is neglected when her sexual proclivities are no longer luring to her mate as they were in earlier life. She may become jealous and accuse him of infidelity. Quite often a wife berates her husband publicly and privately. She believes she has married a man of her own nature and does not realize that he is physically and emotionally different. Some women are keenly analytical of man's genetic behavior and know more about their husbands and sons than they do about their daughters and themselves. They are usually interested in such subjects as sane sex living, sex ethics, sex freedom, birth control and maternal health, and seek enlightenment by reading, attending lectures and consulting the family physician.

On the other hand a man may become suspi-

cious of those with whom he is working. He feels that others are holding him down and are getting the better of him. He may even picture the woman with whom he lives as a mere object for his sexual gratification and have no love for her. This situation may terminate ultimately, and usually does, in domestic disaster.

### Woman After Forty

The menopause connects two eventful periods in a woman's life, the span of childbearing and the later years of greatest intellectual vigor. The gloomy picture of "change of life" painted by the laity is thoroughly unjustified. It has been said that from fifteen to forty are a woman's richest years—years of vitality, courage, accomplishment, emotion, charm. Yet there is a time in her life after forty at which she may be endowed with frank happiness and a healthy vigor of mind and body heretofore unsurpassed. For many women of the upper social classes, life really begins at forty. At that time they undergo a temperamental renaissance. Doctor Graves, the eminent gynecologist, aptly puts it: "Relieved of the anxieties of childbearing and the annoyances of menstrual function, and reconciled to the cosmetic alterations of old age, they acquire a mental and physical vitality never before experienced, and enjoy for a decade or two the best years of their life."

Some women past the climacterium, especially those who have never borne children and those of the maiden class, may acquire an attractiveness that they never before possessed.

Intellectual attainments may become prominent. Often, a woman enters a new and calm enjoyment of intellectual occupations, becomes an important factor in society and finds more time for her family and home. To offset her decline in sex life, she turns to writing, art, politics, and many other worth-while endeavors. History tells us that many women have become nationally famous in various fields. Examples of such women may be called to memory and are observed every day in civic life.

The woman whose life has been spent in mere pleasure-seeking, who has neglected the cultivation of mind and heart, and who knows nothing of the peace and poise found in the comforting assurance of a Christian faith, finds life wearisome and lonely. When she discovers that she no longer attracts the opposite

sex and is unable to acquire new interests, she becomes bitter, repressed, misunderstood, and drifts on into an unhappy, retrospective old age.

Upon the mental horizon of every woman, as she approaches the forties, there looms this pending crisis through which she must inevitably pass. In the minds of many, tradition has instilled a fear that when the change supervenes the bloom of life will fade and the burdens of age will be assumed. She may sadly refer to her more youthful attractions, in the words, "When I was a woman." But when a woman reaches maturity she should not be impressed with the notion that her life is limited by her reproductive activity and by her reciprocal relations with the opposite sex, and that after the cessation of this function there will remain little of interest for her during the remainder of her mundane existence other than to train her daughters to occupy a similar field of procreation activity. A broader and truer view is that life is a school in the vestibule of eternity leading to larger spheres of activity, responsibility and enjoyment, and each age is important and brings its own opportunities for spiritual development and achievement.

The woman after forty should realize that her life is a treasury filled with the wealth of experience that she has accumulated from childhood to maturity. Childhood, the age of acquisitiveness, discipline and untainted joys; early maturity, with its happy relationships and fascinating revelations of conjugal life; home, husband, children—each have contributed a most valuable share. And now, maturity, merging invisibly as it does, into old age and the more abundant, untrammelled life beyond, places the crown of experience and authority upon her worthy head. Many of our noblest citizens, most devoted to the common welfare, are women at this period of life. They are living in a period of rejuvenescence—"The gauge of their age is not years, but vital force."

Until a few years ago the medical profession had little to offer the woman suffering from the menopausal syndrome. Treatment consisted chiefly of sedatives and psychotherapy, but today the progress of scientific medicine has made it possible to relieve the troublesome symptoms of the climacterium and to do much to make a woman's life enjoyable to her. The woman who

is unable to adjust herself to the conditions of life under which she is living frequently asks herself the question, "Why was I born a woman?" and then often finds escape from her emotional difficulties in illness.

The profound economic and social changes that have occurred in the lives of most American women and those of other civilized countries during the last fifty years have directed new interest to the health problems which concern women particularly. The economic independence of woman plays an important part in her health. In order to keep herself physically fit so that she may compete with man in the world today, a woman should pay particular attention to her physical and mental health. The responsibility for domestic management involves a much greater output of physical energy than that to which a woman has been accustomed.

One is led to believe that the health of a married woman is more precarious than that of her unmarried sister, but it appears that the reverse is actually the case. The biologic norm is more closely fulfilled by marriage which increases the mental and bodily well-being of a woman, provided the simple rules of health are followed. Goodwin in the "Health of the Married Woman" states that when a woman marries there are four main directions in which her life is altered:

1. Responsibility for domestic management.
2. Companionate life.
3. Sex life.
4. Reproductive life.

The problem of companionate existence for a woman who marries is likely to be more difficult than for a man. This is largely because most men have always been to some extent dependent on female supervision, while a woman generally develops a philosophy of independence to the opposite sex.

Upon the gynecologist today rests the difficult task of guiding a woman through this most trying period of her life to the end that she may safely reach the quiet waters and serene environment of a happy mature age. "This channel is beset with treacherous rocks and shoals upon which the ship of health of woman may only too readily be wrecked or stranded."

### Conclusion

Success and happiness in married life depend chiefly upon a *well-balanced mutual relation* of husband and wife. After forty this should include an intimate understanding of the changes taking place in their natures. Both must realize that married life cannot go on indefinitely on a diet of romance, but that good comradeship and mutual respect must exist and thrive continuously. There must be mutual respect for each other's personality, good sense and judgment, entire confidence and frankness when problems arise and responsibilities present themselves. Happiness, contentment, and life abundant will be the result.

The family of today should control its social behavior by a *code of irreproachable manners, morals and customs*. It should be a one-wife, one-husband family for man is no more polygamous than woman is polyandrous. Polygamy and polyandry are innovations in human society as are infanticide, prostitution, celibacy, homosexuality, autoeroticism, and other sex psychoses, which are "as barren as vestal virgins and biologically as useless."

*Modernistic marriage* has come into existence during the last few years. Our experience with it is too inadequate to really accept it as a part of our present social structure. It may be likened to a mirage—a vision of sensuous splendor which appeals at first but soon fades into an unsuccessful experiment.

The increase of number of divorces and broken homes in the United States makes another phase of *marriage education imperative*. There is a tendency at the present time to place too much importance on the physical side of marriage. It is important, but not all important. Each party to a marriage should understand that love, good old fashioned love, not just a passing whim, must exist.

"Life is not a stagnant pool, it is a flowing river carrying the human race to higher standards, to newer and better things, to more complete understanding of our environment and to marvelous revelations of the potentialities within ourselves."

MSMS

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## Sulfathiazole in Exfoliative Dermatitis

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■ THE purpose of this paper is to record another case of recovery in massive exfoliative dermatitis treated with sulfapyridine, and, particularly, to suggest that massive wet exfoliative dermatitis, or "epidermolysis," is a symptom of a severe toxic or septic state, and that what have been previously felt to be clinical entities, namely neonatal pemphigus and Ritter's disease, may occur at ages other than neonatal infancy, and may possibly not be entities at all but merely types of reaction to a septicemia, bacteremia, or localized staphylococcal infection.

Ritter von Rittershain, in 1870, first described an acute disease of the first month (usually first week) of life, associated with massive epidermolysis, septic course and usually fatal outcome. He reported some 297 cases in ten years. Since then fewer and scantier reports are found and, although Ritter himself believed this disease a pyogenic infection, the literature is confused regarding the cause and also regarding its relationship to pemphigus neonatorum, which, in children at least, is generally agreed to be a staphylococcus skin infection.

Hart<sup>5</sup> described two institutional epidemics of pemphigus neonatorum and Daveo<sup>2</sup> one, in which the skin manifestations and the clinical courses varied from mild illness with a few discrete bullae to massive exfoliative dermatitis with septic course and termination indistinguishable from Ritter's disease. Daveo states that he feels that Ritter's disease is merely a fulminating and more massive type of pemphigus neonatorum.

The pathology of Ritter's (Cailliau,<sup>1</sup> Kendall<sup>6</sup>) is not different from that found in fatal pemphigus cases, only the rapidity of the clinical course and extent of dermolysis seem to vary.

While Raschkes<sup>7</sup> reports a case of an infant born with established Ritter's disease, most cases, as for pemphigus neonatorum, start in the first week and recover or die in the second or third,

though one of Ritter's own cases occurred in the seventh month of life.

It is because of this reported neonatal incidence that we offer the present case with some hesitation and explanation.

### Case Report

The patient, L. A. B., was a white male, aged fifteen months, weight 22 pounds. Normal at birth and of 7 pounds weight, he was the fourth male offspring. The family history was normal except that an older sibling had died of erysipelas before the birth of the patient.

This patient was well until February 5, 1941, when he broke out with measles, acquired from an older brother. He was up and about again by February 15 and seemed recovered when on February 18 he appeared irritable, refused supper and went to bed early. At 2:00 A.M. he was found in severe convulsion, with high fever, followed by drowsiness and very rapid pulse but negative neurological findings. At 4:00 A.M. the convulsion was repeated, the fever 104, the pulse 160 and the respirations 40. At 7:00 A.M. the convulsion was repeated again and the patient was taken to Hurley Hospital. At 9:00 A.M. the skin was carefully examined for petechiæ as possible evidence of epidemic meningitis, and none were found. At 9:30 A.M. a spinal puncture was done and the skin stood a vigorous preparation with 7 per cent iodine followed by alcohol. The spinal fluid, under 20 mm. mercury pressure, showed three lymphocytes, negative Pandy, negative serology and a flat gold curve. During the day a blood count and blood culture were made. The child took fluids, was irritable when aroused but in general quite stuporous with occasional carpo-pedal twitchings. The temperature varied from 101 to 103. The pulse varied from 160 to uncountable and the respirations from 60 to 80 a minute although the breathing was easy and the chest clear. When the patient was seen at 5:00 P.M. the same evening a few blebs at the corners of the mouth and some on the forehead were noted, and the nurse stated she had first noted these at about 3:00 P.M. These were typical inflammatory bullæ, but on further examination, loose patches of wet skin which peeled away in sheets leaving red, raw oozing surfaces were discovered on the chest, back, buttocks and glove and stocking areas of the hands and feet. I have emphasized the time relationships here to show how quickly and completely the skin lesions developed. The denuded areas, which denuded upon slightest trauma, looked exactly like second degree burns when the skin came off. With the diagnosis of pemphigus neonatorum in mind sulfapyridine therapy was started, but the dermolysis here seen is not to be confused with the chronic slowly spreading bullous lesion described in textbooks as pemphigus. Tannic acid 5 per cent in a water-base jelly (a proprietary form) was used for the desquamating areas, exactly as for burns, and all areas subsequently healed exactly as for noninfected burned surfaces. The blood count showed 45,000 w.b.c. on admission and this rose, with the fever, to 60,000

w.b.c. in the first eighteen hours of treatment, and then fell steadily (as did the fever) as the patient improved during the next eight to ten days. After eighteen hours of sulfapyridine therapy the temperature began its fall, the new areas of desquamation were reduced and at twenty-four hours, the child had changed from a drowsy moribund pallorous infant to an ill, fretful, active child of good color. At forty-eight hours the sulfapyridine was stopped because of diarrhea, marked abdominal distension and vomiting. In eight hours sulfathiazole was started and continued for the next eight days and the child progressed steadily to recovery.

The admission blood culture showed hemolytic *Staphylococcus aureus*, and the same organism was again recovered on the third day, many colonies being obtained from only two cubic centimeters of blood. The hemoglobin showed a rapid decline after three days and three small transfusions were given.

The medication consisted of 68 grains of sulfapyridine in the first fifty-two hours of therapy, or a total of 1.5 grains per pound per day. In the next eight days the dose averaged 19 grains a day, or not quite one grain per pound per day. All drugs were stopped on the tenth day when the temperature had been normal for forty-eight hours. Recovery continued and has been complete to date.

### Discussion

One case warrants very little discussion, but from the experiences of others, as reviewed in the literature, and a consideration of this case, I feel that epidermolysis is probably a symptom and not a disease. It is probably a symptom of a severe septicemia, usually due to *staphylococcus aureus*, or of a severe toxemia related to a *staphylococcus* infection, and that Ritter's disease, like severe pemphigus neonatorum is probably an infant or neonatal form of staphylococcal septicemia which may occur at later times in childhood. Ritter's disease is rarely reported now. No one has ever matched his 297 cases, which suggests that its present rarity and the increasing rarity since his day, as well as the increasing rarity of pemphigus, is related to improved general infant hygiene. I agree with Ryan<sup>8</sup> that the new sulfonamide compounds offer a great new hope in this disease and that if further cases like these are reported, the very fact that these drugs effect a cure is presumptive evidence of the nature of the causative agent. I point to the heavy doses of the drugs used and urge that further observers take blood cultures and report their cases. I feel that the bullæ or the extensive epidermolysis are toxic

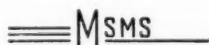
phenomena and not due to infection primarily although staphylococci are found in some blebs and may be cultured from the oozing surfaces.

### Summary

A case of wet exfoliative dermatitis associated with hemolytic staphylococcus aureus septicemia in a child of fifteen months is reported. It is suggested that epidermolysis may be a symptom of septicemia and that the two children's diseases showing this phenomenon, namely Ritter's disease and pemphigus neonatorum, may be related staphylococcic septicemias. Chemotherapy now seems to be the treatment of choice.

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### IS THE DANGER PAST?

On September 24, Mr. Charles A. Togut, speaking before the National Fraternal Congress of America, warned that state or governmental medicine will paralyze the country's fifty million voters and destroy the private practice of medicine. He said:

"National Defense has catapulted the issue of the 'Nation's Health' onto the front page of every newspaper and onto the burning wires of every radio transmitter. As in nations ruled by the sword, malicious propagandists are piercing the heart of our incomparable system of medical care.

"The Congress of the United States is weighing the destiny of our peoples and of our doctors with numerous authoritarian legislative medical measures. The battle of the century, the government versus the American Medical Association, is but a prelude to the conditioning processes of a National Planned Medical Care Program, unless the American peoples, the doctors, the industrialists, the leaders of labor and capital can smother the most powerful propaganda factory in the world and inaugurate fighting means and methods to unite the leaders of medicine and industry in a progressive Health Insurance Movement."

Today there is greater cause for fear and a greater need for constant and intelligent vigilance than at any previous time if the independence of medicine is to be preserved.—NATIONAL PHYSICIANS COMMITTEE.

DECEMBER, 1941

## Movement for the Registration of Vital Statistics

By Earl E. Kleinschmidt, M.D., Dr.P.H.

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Efficient registration of births, marriages, and deaths has so many points of moral, legal, and commercial interest, that we might expect more earnest calls upon the law makers from other sources. But experience proves that none realize its importance so much as the medical statistician, and on us devolves the duty of pressing its claims.

J. H. BEECH, M.D., Coldwater, 1857.<sup>1</sup>

■ PRIOR to 1850 the only available statistics of Michigan consisted of census returns made in 1840 by the federal government.<sup>2</sup> This was the first census of Michigan as a state. It was recorded at that time as having 212,267 inhabitants.<sup>3</sup> In 1850, this number had increased to 397,654, a gain of 185,387 persons; in 1860 the State had 749,113 inhabitants; and by 1870 it had increased to 1,184,059 people;<sup>4</sup> making it the thirteenth state<sup>5</sup> in point of population.

In 1856, a law was enacted which required the registration of marriages, but it was carelessly observed. "So little attention has been paid to it," said Dr. N. B. Stebbins of Detroit, "that the records in the clerk's office in the county of Wayne—the most populous county in the State—show, as we are informed, that only 419 marriages were recorded in that office for the year 1856."<sup>6</sup> The law had many imperfect features, and accordingly those entrusted with the duty of carrying out its provisions, though subject to heavy penalty for neglect, wilfully ignored its provisions. One reason perhaps that accounted for this state of affairs was the fact that no annual report was required of the registrars.<sup>7</sup>

<sup>1</sup>Pen. Jour. Med., 4:535, (April) 1857.

<sup>2</sup>Jour. House of Rep. State of Michigan, 1:11, 1872.

<sup>3</sup>Loc. cit.

<sup>4</sup>Loc. cit.

<sup>5</sup>Loc. cit.

<sup>6</sup>Ibid., 3:613, 1857; An. Rep. M.S.M.S., 1:91, 1859.

<sup>7</sup>An. Rep. M.S.M.S., 1:84, 1859.

### Efforts of State Medical Society to Secure Registration Law

As is indicated by the quotation found at the beginning of this article, the medical profession had a deep interest in the proper registration of vital statistics in the state. This interest manifested itself soon after the State Medical Society was organized in 1853. The physicians most responsible for initiating the movement for the establishment of a registration law in the state were the following: Dr. J. H. Beech of Coldwater, Dr. N. B. Stebbins of Detroit, Dr. J. Adams Allen of Kalamazoo, Dr. George B. Wilson of Port Huron, Dr. J. J. Noyes of Detroit, Dr. J. H. Jerome of Saginaw City, and Dr. Zina Pitcher of Detroit.

Perhaps the most important influence which served to stimulate Michigan physicians to take steps in this direction were the activities of the American Medical Association. In 1853, Dr. B. R. Welford of Virginia, in his presidential address, urged the enactment of laws in various states for the securing of a uniform system of registration of births, marriages, and deaths.<sup>8</sup> During this same meeting a committee was appointed of which Dr. N. B. Stebbins of Detroit was a member.<sup>9</sup> This committee "On Registration of Marriages, Births, and Deaths" subsequently made an extensive report at the ninth annual meeting of the Association at Detroit in 1856. The summary of this report was as follows:

1. The Secretary, or some other officer of State, shall prepare and circulate to the towns, cities, or counties as the case may be, blank forms, for returns, based upon the system and nosological arrangement adopted in the preparation of the mortality statistics of the last census of the United States. (It has been suggested that mumps be added to the list of diseases.)
2. The birth of every child shall be recorded by the parent or owner of the child, stating distinctly the time of its birth, the name and nativity of both its parents, and whether it be the first, second or any other number, by the same parents.
3. Every marriage shall be recorded by the person who solemnizes the marriage contract, stating the names and nativity of both parties.
4. Every death shall be recorded by the person having charge of the premises on which the death shall have occurred, and the record shall distinctly set forth the cause of the death, according to the certificate of the physician having had charge of

the patient, or according to the best of his information which can be obtained, together with the name, activity, age, sex, color, and occupation of the deceased; and these several records shall be given to the clerk of the town, city, or county, as the case may be, and he shall make a return of them, according to the blank forms which he shall have received, to the Secretary or other officer of State who shall annually publish the same.<sup>10</sup>

In 1858, at a similar meeting held at Washington, D. C., by the American Medical Association, Dr. George Mendenhall of Ohio, Chairman of the Committee on Medical Topography and Epidemic Diseases of Ohio, Indiana, and Michigan, recommended to the assembly that Congress be petitioned to pass a law by which a uniform system of registration might be adopted by all states for the purpose of obtaining correct vital statistics by those whose duty it would be to take the census of 1860.<sup>11</sup>

Steps being taken by other states also influenced Michigan physicians to work for a law of this kind. A pioneer in many ways, Massachusetts was the first state to collect vital statistics in this country.<sup>12</sup> It had passed a law for the collection of statistics of births, marriages, and deaths as early as 1842.<sup>13</sup> The first annual report was made February 7, 1843.<sup>14</sup> The priority of this achievement is apparently disputable, for according to available records, Dr. B. R. Welford of Virginia, on the occasion of the sixth annual meeting of the American Medical Association at New York, reminded his listeners that his state had set the example for other states by the enactment of a law for the registration of marriages, births, and deaths.<sup>15</sup> New York passed such a law in 1847, making its first annual report in April, 1848.<sup>16</sup> Ohio passed a similar law in 1856.<sup>17</sup> By 1859, Rhode Island, Connecticut, New Jersey, Kentucky, Vermont, and South Carolina had passed laws for the registration of births, marriages and deaths.<sup>18</sup>

According to available accounts, the provisions of these laws already enacted in other states were

<sup>10</sup>An. Rep. M.S.M.S., op. cit., p. 89.

<sup>11</sup>Pen. and Ind. Med. Jour., 1:667, 1859.

<sup>12</sup>Jour. H. of Rep. State of Mich., 2:1149, 1867.

<sup>13</sup>An. Rep. S.B.H., 9:108.

<sup>14</sup>Jour. H. of Rep. State of Mich., op. cit.

<sup>15</sup>Pen. Jour. Med., 1:43, 1853.

<sup>16</sup>Jour. H. of Rep. State of Mich., op. cit.; The New York system of registration of births and deaths was originated by Dr. Thomas C. Brinsmade of Troy, N. Y. who for 20 years kept a tabulated view of his practice. (An. Rep. M.S.M.S., op. cit., p. 79.)

<sup>17</sup>Pen. and Ind. Med. Jour., 1:667, 1859.

<sup>18</sup>An. Rep. M.S.M.S., op. cit., p. 83.

<sup>8</sup>Pen. Jour. Med., 1:43, 1853.

<sup>9</sup>Ibid., 3:24, 1855.

carefully scrutinized by physicians in Michigan. In his report as Chairman of the Committee on Vital Statistics of the State Medical Society in 1859, Dr. George B. Wilson of Port Huron praised the method of registration being carried out in New York State, and urged that a similar method be adopted by the Legislature of Michigan.<sup>19</sup> Apparently the registration law of Ohio failed to function properly at the start, for Dr. George Mendenhall, Chairman of the Committee on Medical Topography and Epidemic Diseases in Ohio, reported in 1858 at the meeting of the American Medical Association in Washington, D. C., that he was unable to secure any data on births, deaths, and marriages because of "culpable inattention on the part of those whose duty it was to furnish blanks and collect information for these statistics."<sup>20</sup>

Cognizant of the trend of events elsewhere, particularly as revealed in the several reports made at meetings of the American Medical Association,<sup>21</sup> several Michigan physicians took steps to interest others in the subject at meetings of district and state societies. At a meeting of the State Medical Society on March 26, 1856, Dr. J. H. Beech of Coldwater read a paper on "Observations of Diseases at Coldwater, Michigan in 1855." In this report he presented a record of mortality according to age.<sup>22</sup> At this same meeting, Dr. Zina Pitcher of Detroit called attention to some Registration Reports of the State of Rhode Island for the years 1853 and 1854, which on motion were referred to Dr. N. B. Stebbins for further study.<sup>23</sup>

"The publication of the statistics which would be collected by a well-matured and rigidly enforced registry law," said Dr. Stebbins the following year at a similar meeting held at Lansing, "would serve as an annual lesson on the laws of human life in their operation upon ourselves, a kind of practical physiology taught in all our towns and at every fire-side, far more instructive and impressive than any derived from books teaching the principles and laws of life developed by our national constitution, as actually existing under sur-

rounding influences, and pointing to the means for their improvement and modification." And he further asserted, "Statistics of mortality, showing the extent and causes of death in different localities have been demonstrated by the experience of those States and countries where such a law exists, as of the first importance in many respects. In determining whether death in certain cases results from natural causes or otherwise, whether by disease or violence, murder, or accident, it has been frequently found of the greatest moment in the trial of important causes in the courts. Much information would also be elicited as the influence of occupation upon health, in regard to hereditary taint, and it would do much too, to awaken the public to the necessity of preventing the introduction of pestilential diseases. Not the least of these is the facility it would afford in collecting statistics of population, in ascertaining the relative number of births to deaths, and of males to females." "It is to remedy the defects of the law," he said, "so as hereafter to compel a more general compliance with it, and to couple with it a provision also requiring a careful and faithful registry of all the births and marriages in the State, that the action of the Legislature is now required."<sup>24</sup>

The meeting of the State Medical Society the following year saw many things transpire which were to further intensify interest in the problem so ably discussed by Dr. Stebbins. Of utmost significance were the remarks of Dr. J. Adams Allen, President of the Society. "The profession should combine to secure periodical and complete reports of the three principal epochs in every person's history," said Dr. Allen, "viz., birth, marriage, and death. Without this clue there can be no rational comparison of the relative salubrity of different districts of the country, nor any accurate data upon which to found one of the most important problems of political economy; namely, given a certain population in a particular district, how long before it will be doubled or reduced to a moiety?—a question involving the very highest interests of the commonwealth. A registration of births and deaths combined with periodical reports from the vari-

<sup>19</sup>Ibid., p. 78.

<sup>20</sup>Pen. and Ind. Med. Jour., 1:667, 1859.

<sup>21</sup>At several meetings of the American Medical Association in the period 1847-1858, recommendations were made to the different states to adopt a regular system of registration of births, marriages and deaths. (Pen. and Ind. Med. Jour., 1:176, 1858.)

<sup>22</sup>Pen. Jour. Med., 3:497, 1856.

<sup>23</sup>Ibid., p. 495.

<sup>24</sup>Ibid., 4:615, 1857.

ous entreports of immigration, would furnish a reliable constant census—I need not speak here of its advantages in a merely civil point of view, inheritances and the like, but considered only in a professional light—it would tend to the elucidation of a vast number of unexpected truths." Referring to the vast amount of propaganda being spread elsewhere relative to the supposed unhealthfulness of Michigan, he said, "This error a faithful registration would speedily dispel and the augmented population and wealth which would then throng upon us to improve our matchless resources, our soil of unsurpassable fertility, and inexhaustible store of mineral and forest riches, would quickly repay thousand fold the trivial expense involved."<sup>25</sup>

So impressed were the members of the Society with Dr. Allen's views that a committee was appointed in an endeavor to carry them out, and Dr. Allen was made chairman of this committee.<sup>26</sup>

During the same meeting, Dr. N. B. Stebbins of Detroit submitted a report on registration. Dr. Stockwell of Port Huron read a volunteer paper by Dr. Geo. B. Wilson, also of Port Huron, on the "Necessity and Proper Method of Obtaining Vital Statistics." This was enthusiastically received by the membership, and Dr. Wilson voted the thanks of the Society. In addition, Dr. J. H. Beech of Coldwater presented a paper embracing the vital statistics of Coldwater for 1858. Records of mortality, temperature, wind, clouds, and storms were exhibited by Dr. Beech.<sup>27</sup>

Efforts to lay the matter of a registration law before the legislature were made in 1857, and again in 1859. As chairman of the Committee on State Affairs in favor of a law for the Registration of Marriages, Births, and Deaths, Dr. N. B. Stebbins labored for the passage of such a bill in 1857, but owing to the shortness of the legislative session and the amount of business to be transacted, the bill was left untouched.<sup>28</sup> At the meeting of the State Medical Society in 1859, Dr. Stebbins recommended that a committee be appointed to report a resolution and petition in favor of a registration law to be enacted by the legislature during the current ses-

sion.<sup>29</sup> Dr. Beech offered a resolution to the same effect as follows:

RESOLVED, That this Society earnestly recommend to the Honorable the Senate and House of Representatives that they do, at the earliest practicable date, enact the necessary laws requiring and providing for the thorough registration of births, marriages, and deaths, occurring in this State.<sup>30</sup>

Shortly afterwards petitions were circulated among the physicians of the state by the Committee on Vital Statistics consisting of Drs. Geo. B. Wilson and Stockwell of Port Huron as follows:

To the Honorable the Legislature of the State of Michigan:

Your petitioners, the undersigned citizens of this State, respectfully pray your Honorable Body to pass a law requiring the registration of Births and Deaths occurring in this State, the registration to fully exhibit the name of parents, and place of birth. The registration of deaths to exhibit the name, age, sex, occupation, disease, and place of residence of the deceased. The value of such a registration in furnishing proper statistical tables to exhibit the general health of the State, and the ratio of deaths as compared with other portions of the country cannot fail to appear on the increased emigration to the State.<sup>31</sup>

This attempt to secure a registration law was frustrated by events associated with the impending war. Lack of medical publications during the next few years made further inquiry impossible.

### The Enactment of a Registration Law

With the close of the Civil War, physicians returned to civil life and their former pursuits. According to available accounts of medical activities for this period, one of the first subjects to engage their attention was the matter of a law to provide for proper registration of births, marriages, and deaths. Interest in this subject was apparently intensified by the lessons taught by the war.

At a meeting of organization of the State Medical Society on June 5, 1866, a committee on "Vital Statistics" was appointed to resurrect interest in a registration law.<sup>32</sup> On motion of Dr. J. H. Jerome of Saginaw City, this committee was to take immediate action. To the committee

<sup>25</sup>An. Rep. M.S.M.S., op. cit., p. 18.

<sup>26</sup>Ibid., p. 6; Pen. and Ind. Med. Jour., 1:702, 1859.

<sup>27</sup>Pen. and Ind. Med. Jour., 1:703, 1859.

<sup>28</sup>Pen. Jour. Med., 4:613, 1857.

<sup>29</sup>An. Rep. M.S.M.S., op. cit., p. 88.

<sup>30</sup>Pen. and Ind. Med. Jour., op. cit., p. 703; An. Rep. M.S.M.S., op. cit., p. 10.

<sup>31</sup>Ibid., p. 75.

<sup>32</sup>Trans. M.S.M.S., 1:20, 1867 and 1868.

were named Drs. Stewart and Noyes of Detroit, and Richardson of Niles.<sup>33</sup> Later in the meeting it reported that "No provision existed in the State for keeping such statistics."<sup>34</sup>

Apparently other events were to assist the State Medical Society in its efforts to secure a registration law for the state. Following the close of the war, many people claimed pensions and dues from the federal and state governments because of the death of relatives and other losses incurred in the war.<sup>35</sup> Government officials, however, were confronted with an imperfect record system which made the legal aspects of this work most difficult to carry out. Their attention was thus drawn to the necessity for a new law at a most critical time in the history of the state, but at a time that was certain to bring out the inadequacies of the system then in use.<sup>36</sup> J. J. Woodman, Chairman of the Committee on State Affairs of the House of Representatives commented as follows on one occasion in February, 1867, "The subject of a registration law for births, marriages, and deaths in this State, was brought before the Legislature for consideration at a former session and although the measure was not then enacted into a law, it has in the meantime lost none of its importance or usefulness. The only means in this State, at present," he said, "for obtaining information collected through an efficient registration law, are, (1) that collected through the State and United States census, which are taken only once in five years; and (2) that of our State law for the registration of marriage certificates by the county clerk."<sup>37</sup>

By 1867, States having registration laws included Massachusetts, New York, New Jersey, Connecticut, Vermont, Rhode Island, New Hampshire, Pennsylvania, Kentucky, and South Carolina.<sup>38</sup>

Efforts to secure a similar law in Michigan took shape early in 1867. Memorials were directed to the legislature from all parts of the state by physicians and other citizens, requesting the benefits of a system of registration of births, marriages, and deaths. Among the more important were the following: A memorial from

the Northeastern Medical Society embracing the counties of Oakland, Lapeer, Macomb, St. Clair, and Sanilac. This read as follows:

RESOLVED, That we, as a medical society, recognizing the importance and utility of a registration law in this State would most respectfully and urgently recommend to the Legislature, now in session at Lansing, Michigan, to pass a law providing for the registration of births, marriages, and deaths in this State.<sup>39</sup>

On January 16, 1867, the Hon. Seth K. Shetterly, representative from the second district of Macomb county, having given previous notice, and having been granted leave, introduced a bill to provide for the registration and return of births, marriages, and deaths to the House of Representatives.<sup>40</sup> This became known as House Bill No. 219, "A Bill to Provide for the Registration of Births, Marriages, and Deaths."<sup>41</sup> On receipt of the original bill prepared by the Hon. Shetterly and the sponsors of the bill, the Committee on State Affairs revised it, preparing a substitute which they sent back to the House of Representatives recommending that the substitute be passed: In the words of the Hon. J. H. Woodman—"thinking that a law more simple in its provisions, and less expensive in its operations would be more acceptable to the people of the State, your committee has prepared a substitute for the bill."<sup>42</sup> The Senate returned the bill with an amendment providing, "That no person shall be required to answer any question which will tend to criminate himself or herself, upon any such examination."<sup>43</sup> The changes thus incorporated into the original bill were later to make

<sup>39</sup>Det. Rev. Med. and Pharm., 2:204, 1867; also a memorial from Dr. N. B. Stebbins, in behalf of the Wayne County Medical Society; also the petition of Edward Cox, S. S. French, N. M. Campbell, E. G. Slater, W. G. Sanders, and James A. Dean, physicians of Battle Creek; D. D. Lamond and twenty-eight other citizens of Genesee county; J. H. Beech and fourteen other citizens of Branch county; E. Boyland and twenty-three other citizens of Wayne county; B. Aldrich and forty-two other citizens of Macomb county; D. A. Past, J. Tripp, Wm. G. Cox, and eight other citizens of Ypsilanti; W. R. Nims, and eight other citizens of Sanilac county; Earl Smith and twenty-four other citizens of Burlington, Calhoun county; H. B. Shank, M.D., G. E. Ranney, M.D., I. H. Bartholomew, M.D., H. B. Baker, M.D., W. C. Payne, W. Jones and Daniel L. Case, physicians and citizens of Lansing; Watson Loud and seven other physicians of Romeo, and vicinity; Samuel A. Babbitt, M.D., and six other citizens of Washington, Macomb county; O. E. Bell, M.D. and twelve other citizens of Oxford, Oakland county; Chas. Shepard and eighteen other citizens of Grand Rapids; A. P. Drake, M.D., and thirteen other citizens of Barry county; Wm. Brownell, M.D., and ten other physicians and citizens of Utica and vicinity; E. C. May and twenty-one other citizens of Livingston county; J. Paddock, M.D., and six other physicians of the city of Pontiac; M. C. Kenny, M.D., and twenty-one other citizens of Lapeer county; E. G. Berry, M.D., and seven other physicians of Branch county; and J. L. Valade, M.D., and eight other citizens of Monroe county. (Jour. H. of Rep. State of Mich., 2:1148, 1867.)

<sup>40</sup>Ibid., 1:183, 1867.

<sup>41</sup>Ibid., 2:1548, 1867.

<sup>42</sup>Ibid., p. 1155.

<sup>43</sup>Ibid., p. 2:39.

<sup>33</sup>Det. Rev. Med. and Pharm., 1:191, 1866.

<sup>34</sup>Trans. M.S.M.S., op. cit., p. 23.

<sup>35</sup>An. Rep. Reg. of Births, etc., Secretary of State, 1:2, 1868.

<sup>36</sup>Loc. cit.

<sup>37</sup>Jour. H. of Rep. State of Mich., op. cit., p. 1149.

<sup>38</sup>Loc. cit.

the functioning of the law most difficult. The bill was finally passed by a vote of 65 to 13.<sup>44</sup> Mr. Shetterly moved that the bill be ordered to take immediate effect. For some reason not ascertainable in available literature, he later withdrew his motion. The bill was laid on the table temporarily, but was finally approved and became a law on March 27, 1867.<sup>45</sup>

As originally enacted, the law provided for the assistance of a committee composed of physicians from the State Medical Society and the Medical Faculty of the University of Michigan.<sup>46</sup> This committee was expected to assist the Secretary of State in the preparation of the annual registration reports. As pointed out later by Secretary Baker, this did not provide the Secretary of State with adequate medical assistance on which he could depend. It is of interest also to learn from Dr. Baker that "no committee was appointed to supervise the work of the Reports by either of the bodies of medical men mentioned in the law."<sup>47</sup>

In preparing the first annual report of the vital statistics of the state, the Secretary of State was assisted by Dr. I. H. Bartholomew of Lansing who "rendered valuable assistance in the nomenclature and classification of diseases."<sup>48</sup>

Dr. Bartholomew at the time was chairman of the Committee on Vital Statistics of the State Medical Society.<sup>49</sup> His work also was evidently well esteemed by the State Medical Society, for, at Dr. Geo. Ranney's suggestion, a resolution was passed by the Society thanking him for his labors upon the report.<sup>50</sup>

In the following year, assistance was rendered the Secretary of State by Dr. Geo. Ranney, also a member of the Committee on Vital Statistics of the State Medical Society.<sup>51</sup> He was largely responsible for the second annual report of 1869 for which he also received the thanks of the Secretary of State and State Medical Society.<sup>52</sup>

In 1869, the task fell to Dr. Henry B. Baker of Wenona, a new member of the Committee on Vital Statistics of the State Medical Society.<sup>53</sup> He retained the position of Registrar of Vital Statistics until 1873, at which time he became Superintendent of Vital Statistics and Secretary of the State Board of Health.<sup>54</sup> He remained in close touch with the system of vital statistics until 1883 when by an act of the legislature the work was practically withdrawn from all medical supervision.<sup>55</sup>

In the preparation of the annual registration reports, the Secretary of State, the Hon. Oliver L. Spaulding, was greatly influenced by the work being carried out in Massachusetts. In the first annual report, he freely acknowledged his obligation to the Secretary of State of the State of Massachusetts, the Hon. Oliver Warner, "for reports, forms of blanks, and information" furnished him.<sup>56</sup>

#### Imperfections of Original Registration Law

From the very time that the registration law was first put into effect it was realized by the Secretary of State and those physicians who assisted him, that it possessed many imperfections which detracted from its efficiency.<sup>57</sup> As explained Dr. I. H. Bartholomew, "The reason why a better registration law was not passed by the legislature, was, that the members were wholly unacquainted with the needs of the medical profession in this respect."<sup>58</sup>

Supervisors and assessors of counties in the state neglected to report births and deaths, alleging that they received no additional salary for this increase of their duties.<sup>59</sup> Moreover, certain provisions relative to the time for gathering birth and death statistics also caused poor returns. According to the law, the supervisor or assessor was not expected to ascertain by inquiry of the inhabitants the births and deaths which had occurred in their respective townships, cities, or wards during the year until the tenth day of April to the first day of June of the year following.<sup>60</sup> As Dr. H. O. Hitchcock pointed out, there were three major sources of error:

<sup>44</sup>Loc. cit.

<sup>45</sup>An. Rep. Reg. of Births, etc., Secretary of State, 1:195, 1868.

<sup>46</sup>Ibid., p. 199; Trans. M.S.M.S., 24:2, 1894.

<sup>47</sup>An. Rep. Reg. of Births, etc., Secretary of State, 4:15, 1872.

<sup>48</sup>Trans. M.S.M.S., I (1869), 12; the first annual report of vital statistics included a single table of results of meteorological observations made at the Agricultural College during 1867 by Prof. R. C. Kedzie. (An. Rep. S.B.H., 9:114.)

<sup>49</sup>Loc. cit.

<sup>50</sup>Ibid., p. 16.

<sup>51</sup>An. Rep. Registration and Return of Births, Marriages and Deaths, II (1868), iv.; Trans. M.S.M.S., 1:13, 1870.

<sup>52</sup>Ibid., p. 17.

<sup>53</sup>Trans. M.S.M.S., 24:2, 1894.

<sup>54</sup>An. Rep. S.B.H., 10:38.

<sup>55</sup>Trans. M.S.M.S., op. cit., p. 2.

<sup>56</sup>An. Rep. Registration and Return of Births, Marriages and Deaths, op. cit., p. vii.

<sup>57</sup>C. L. Wilbur, "Registration of Vital Statistics in Michigan," Trans. Michigan State Medical Society, 24:2, 1894.

<sup>58</sup>Trans. M.S.M.S., 1:17, 1867.

<sup>59</sup>Ibid., p. 39.

<sup>60</sup>An. Rep. S.B.H., IV, 10.

1. The time during which these inquiries are to be made—more than a year after many of the events have transpired—would be pretty sure, either from forgetfulness or from change of location, to lead to a great number of omissions.

2. These facts are to be ascertained by actual inquiry or otherwise, as the indolence, carelessness, or indifference of the officer may suggest as the easiest way to satisfy the state, which makes no provision for determining the faithfulness or punishing the unfaithfulness of those to whom it commits this duty. The fee paid for each recorded case is not sufficient of itself to induce great accuracy, nor are there any methods provided for proving the accuracy of these reports.

3. The supervisor or assessor may fairly be presumed to be not a physician, and with no special qualifications for ascertaining exactly or recording with accuracy, of what disease any person may have died several months or a year before. He must take the statement of the family, friends or neighbors; and how much reliance there is to be placed upon the memory of such persons as to the cause of a death that took place months before, any educated physician can understand who knows how his diagnosis of disease is, often at the time of making it, falsified or caricatured by ignorant and forgetful friends and prejudiced neighbors.<sup>61</sup>

To overcome this latter difficulty it was suggested by Dr. Baker that the office of registrar be created in each city and township of the state.<sup>62</sup> "In my opinion," said Dr. Baker, "this Chief Medical Officer of Health which should exist in every city, village, and township, is the proper person to take charge of the statistics of births, and deaths in such city, village and township."<sup>63</sup>

Following his appointment as Registrar of Vital Statistics in 1869 and thereafter until he became Superintendent of Vital Statistics, Dr. Baker made many suggestions to the Secretary of State for the improvement of the Registration Law.<sup>64</sup> In his frequent appearances before meetings of the State Medical Society, he also took occasion to point out needed changes in the law to the physicians in attendance at these meetings.<sup>65</sup>

Dr. Hitchcock was likewise a frequent speaker on the subject at medical meetings. In his annual address before the State Board of Health in 1876, he stated that, "One of the strongest and most persistent efforts of this Board should be to secure more complete and reliable vital statistics of the people of Michigan."<sup>66</sup> He objected to the gathering of these statistics by supervisors

and assessors claiming that they should be gathered by those persons who were participants in the event as physicians, midwives, sextons, and parents. He also was in favor of assessing penalties for those who failed to enforce the law.<sup>67</sup>

As might be expected, the several sources of error already pointed out did lead to imperfect returns of birth, marriage and death statistics, thus depreciating the value of those which were gathered. For many years, at least forty per cent had to be added to the reported deaths in order to approximate the probable number of deaths, according to MacClure.<sup>68</sup> In 1871, Dr. Baker declared on one occasion that not more than fifty-five per cent of the actual deaths in the state were reported.<sup>69</sup> As for the systems of vital statistics in the cities of the state, conditions at this time were still worse. Speaking before the Sanitary Convention of Grand Rapids, in 1880, Dr. Baker declared, "The vital statistics of the city, which lie at the very foundation of effective public health service, have never been properly collected. No tables carefully compiled under the immediate supervision of a medical man or vital statistician are regularly published by any city in Michigan."<sup>70</sup> In 1880, at a meeting of the State Board of Health, Dr. H. F. Lyster called attention to the lack of accurate statistics in Detroit.<sup>71</sup> "One of the great disadvantages which the Board had to contend with through most of its existence," said MacClure, "was the imperfect returns of deaths."<sup>72</sup>

In the course of time many attempts were made to improve on the original registration law of 1867. Compensation of supervisors and assessors who gathered the statistics was openly advocated by Secretary of State O. L. Spaulding in 1870 in order to encourage better reporting;<sup>73</sup> this suggestion was made again in 1883 by the Hon. LeRoy Parker of the State Board of Health.<sup>74</sup> The Committee on Vital Statistics of the State Medical Society repeatedly exhorted the physicians of the state to make their statistics "as full and perfect as possible."<sup>75</sup> At the annual meeting of the Society in 1872, a committee was appointed to study a portion of President Hitchcock's address which dealt with vital statistics

<sup>61</sup>Loc. cit.

<sup>62</sup>Ibid., p. 127.

<sup>63</sup>Loc. cit.

<sup>64</sup>An. Rep. Reg. and Return of Births, Marriages and Deaths, op. cit., 6:xi, 1872.

<sup>65</sup>Trans. M.S.M.S., 3:82, 1872.

<sup>66</sup>An. Rep. S.B.H., 4:9.

<sup>67</sup>Ibid., p. 11.

<sup>68</sup>MacClure, op. cit., p. 23.

<sup>69</sup>An. Rep. S.B.H., 4:10.

<sup>70</sup>Ibid., 8:129.

<sup>71</sup>Ibid., p. xlv.

<sup>72</sup>MacClure, op. cit., p. 23.

<sup>73</sup>An. Rep. Reg. and Return of Births, Marriages and Deaths, 3:4, 1869.

<sup>74</sup>An. Rep. S.B.H., 11:xxxii.

<sup>75</sup>Trans. M.S.M.S., op. cit., p. 83; *ibid.*, 1:16, 1869.

and preventive medicine. The deliberations of this committee, which followed, ultimately led to the creation of the position of State Superintendent of Vital Statistics.<sup>76</sup>

Attempts to amend the law by legal methods were repeatedly made by members of the State Medical Society. The first attempt in 1869, so the records point out, was successful. Act No. 125, Session Laws of 1869, was approved April 3, 1869.<sup>77</sup> This amendment made the registration year identical with the calendar year. From then on the attempts made were generally unsuccessful, or fell short of their goal. In 1871, another amendment to amend Section 3 of Act No. 125 of the Session Laws of 1869 met with so much opposition from both branches of the legislature that it failed to pass.<sup>78</sup>

At the annual meeting of the State Medical Society in 1872, the Committee on Vital Statistics made recommendations in a lengthy report to secure more full and accurate returns of births, diseases and mortality. Available records, however, fail to explain what action the Society took.<sup>79</sup>

In 1876, at a similar meeting, Dr. Baker made the recommendation that a committee be appointed to draft a memorial to the legislature for the enactment of a law amending the law for the collection of vital statistics.<sup>80</sup> This suggestion was accorded a favorable reception, and a committee consisting of Drs. Baker and Hitchcock was appointed to draw up such a bill and to report at the next regular meeting.<sup>81</sup> Again for some reason that the records fail to reveal, no further mention of the undertaking is made at the next meeting.

Again in 1878, Prof. R. C. Kedzie recommended to the Society that a committee be appointed to prepare a suitable bill which should incorporate the needed changes. He further recommended that this committee bring the subject before the legislature for their consideration.<sup>82</sup> Dr. Baker and the Hon. LeRoy Parker were named to the committee, but again the sources perused fail to disclose any further action being taken.<sup>83</sup>

Not until 1897 did the members of the medical profession finally succeed in getting a more

desirable law passed which would bring about the needed changes. This law provided for immediate return of birth, marriage, and death reports.<sup>84</sup>

#### Role of Dr. Henry B. Baker

In the foreground always, Dr. Baker labored incessantly to improve the vital statistics of the state, from the time he came to Lansing in 1869 to assist in the preparation of the annual registration reports, until the system of collecting vital statistics became more accurate. For several years prior to Dr. Baker's becoming the Superintendent of Vital Statistics, the need for a medically trained statistician had demonstrated itself to the Secretary of State responsible for carrying out the Registration Law. "In the preparation of this report (1870)," said the Hon. O. L. Spaulding, "the services of a physician of recognized ability and standing in the profession are not only desirable, but almost indispensable."<sup>85</sup> The Hon. Daniel Striker, who succeeded Mr. Spaulding, went even a step further. In his introductory remarks to the fourth registration report, he stated that the preparation of vital statistics called for the services of "an experienced statistician, who should be a physician of recognized ability and standing in the profession." "The law," he said, "should provide compensation corresponding with its requirements."<sup>86</sup> Dr. Baker's excellent work won for him immediate reputation. Each annual report carried words of praise for him from the Secretary of State. Said the Hon. O. L. Spaulding of Dr. Baker in 1870, "I take pleasure in acknowledging my obligation, and to whom is due whatever of merit it (referring to the Registration Report of 1869) may contain. Possessing a rare fitness and ability for the work, he has devoted to it much time and labor."<sup>87</sup> Coming to Lansing finally in October, 1870, to superintend the compilation of vital statistics, he soon became an ardent advocate of everything pertaining to preventive medicine, and as such became one of the most powerful figures in the movement for sanitary reform.<sup>88</sup> Typical of the wisdom he showed

<sup>84</sup>MacClure, op. cit., p. 23.

<sup>85</sup>An. Rep. Reg. and Return of Births, Marriages and Deaths, op. cit., p. 4.

<sup>86</sup>Ibid., 4:v, 1870.

<sup>87</sup>Ibid., III, 4.

<sup>88</sup>MacClure, op. cit., 9; at a meeting of the state medical society, President I. H. Bartholomew appointed Dr. A. B. Palmer of Ann Arbor to assist the Secretary of State with the preparation of the Registration Report. Dr. Palmer, however, gave way to Dr. Baker in order that "the effort for the proposed State Board of Health might be better subserved. (Loc. cit.)

<sup>76</sup>Ibid., 3:41, 1872.

<sup>77</sup>An. Rep. Reg. and Return of Births, Marriages and Deaths, 1:195, 1869.

<sup>78</sup>Trans. M.S.M.S., 24:4, 1894.

<sup>79</sup>Det. Rev. Med. and Pharm., 7:323, 1872.

<sup>80</sup>An. Rep. S.B.H., 5:130.

<sup>81</sup>Ibid., p. lv.

<sup>82</sup>Ibid., 6:8.

<sup>83</sup>Ibid., p. liv.

in whatever he set his mind to, is a report he made at a National Conference of State Boards of Health in 1886 relative to the adoption of a uniform system of vital statistics for the United States and Canada. It was his opinion that to adopt such a system as was proposed would be to adopt permanently an imperfect system. Instead, he advised that each state and province employ a man to perfect a system within his own state before such a system be contemplated.<sup>89</sup>

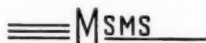
### Social Statistics

Another form of statistics that received attention from legislators at about this same period was social statistics.<sup>90</sup> On complaint of the Census Bureau at Washington in 1870 of "the great difficulty in obtaining from this state what are termed social statistics," Gov. Henry P. Baldwin recommended legislation to secure such statistics in Michigan in July, 1870, and in September of the same year the legislature passed a law for this purpose.<sup>91</sup>

<sup>89</sup>An. Rep. S.B.H., XIV, 187; in 1878, Dr. Baker was appointed to a committee to confer with other similar committees in other states relative to a uniform plan for the registration of births, marriages, and deaths. (An. Rep. S.B.H., 7:xliv.)

<sup>90</sup>Jour. H. of Rep. State of Michigan, 8:61, 1870.

<sup>91</sup>Ibid., p. 24; Ibid., p. 110.



## Presacral Resection for the Relief of Pain

By John C. Scully, B.S., M.D.

Menominee, Michigan

JOHN C. SCULLY, M.D.

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■ THE historical aspects of presacral resection have been most thoroughly reviewed in a paper by Walter D. Abbott, M.D., of Des Moines, Iowa. As Dr. Abbott points out, this operation is not new, since it was performed as early as 1898 by Jaboulay. However, recently (1926-1940) there have been numerous articles written about the operation which indicate renewed interest in this

procedure. It has been recommended for a variety of conditions, including Hirschsprung's congenital megalocolon, urinary vesical pain due to tuberculosis, and intractable bladder infections, and dysmenorrhea of the so-called functional type.

In some instances the results have been gratifying, and in others the results have been indifferent. Since this particular type of surgery is in its comparatively early phase, I believe that any contribution to our present knowledge, no matter how minor, may be of some value.

Resection of the superior hypogastric plexus for the relief of severe dysmenorrhea has been endorsed by such competent surgeons as G. Cotte of France, A. A. Davis of England, Walter D. Abbott, Winchell McK. Craig, and Nelson M. Percy in this country, and with these recommendations in mind, I have performed a presacral resection for the relief of pain presumably due to a congenital uterine anomaly.

### Case Report

The patient, M. G., an unmarried white female of twenty-three, came under observation, complaining of severe dysmenorrhea of ten years' duration. Her menstrual history was as follows:

*History.*—The menarche occurred at the age of thirteen, and from the onset her periods were markedly irregular, varying from the usual twenty-eight days to five or six months. During each period she had very scant flow, using only one or two pads daily. No clots were passed at any time. Each period was associated with pain severe enough to necessitate four or five days of bed rest and the liberal use of opiates. There was slight leukorrhea between periods. She denied intercourse or venereal infection. Her last period prior to coming to the office was, as usual, associated with very severe dysmenorrhea, low back pains, and general malaise.

*Examination.*—Complete physical examination and the usual laboratory procedures, including basal metabolic rate, failed to reveal any abnormalities except of the pelvic viscera. The introitus was virginal so that satisfactory pelvic examination could be carried out only under anesthesia. The patient consented to this examination and it was observed that the Bartholin and Skenes glands were normal. The cervix was small and pointed anteriorly. The external os was patent and there was slight cervical erosion. The uterus was apparently displaced to the left. It was anteverted, smooth, firm, and nulliparous. At the right utero-cervical junction there was a mass protruding into the right adnexa equal in size to the uterus and apparently connected to the uterus at the above location.

This mass also seemed anteverted. The left tube and ovary were normal in location, size, shape, consistency, mobility, and attachments. On the right side a normal tube and ovary could also be palpated and were not apparently displaced by the mass described. The mesial attachment of the right tube could not definitely be determined. The adnexa, apart from the above, felt normal. A diagnosis of subserous uterine fibromyoma was made, and uterus didelphys unicollis was also considered. As a conservative measure, in order to correct the dysmenorrhea, the cervical canal was dilated up to the caliber of a No. 22 French sound at the time of examination. The patient had been given appropriate glandular therapy prior to this examination and in spite of this no correction of her menstrual irregularity had been effected.

The patient was advised to wait until another period to determine if dilatation would afford relief. This period occurred after 6 weeks from the onset of the previous period and was in no way affected by the dilatation and the previous severe menstrual pain persisted. Operation was then advised.

*Operation.*—At operation the patient was found to have uterus didelphys unicollis. This particular anomaly appeared singular in that each of the uteri were equally developed and situated in the same relative position. There was a peritoneal fold passing from the sacrum anteriorly between the base of the two uteri and merging anteriorly with the peritoneum covering the posterior aspect of the bladder. Attached to the lateral cornu of each uterus was an entirely normal tube, ovary and broad and round ligament. There was no other demonstrable lesion or abnormality in the pelvis.

Since pain was the primary complaint, there seemed to be no reason to attack the anomaly surgically, and the case presented an ideal indication for division and resection of the presacral nerve. This procedure was carried out after the technique described by Drs. N. M. Percy and H. P. Beatty with a modification suggested by Dr. A. H. Curtis. The operation was completed by a radial cauterization of the cervix. The patient made an uneventful recovery.

*Convalescence.*—During her convalescence the patient had a menstrual flow lasting 6 days (normal for this patient) and during this time was entirely free of pain. Since the operation the patient has had 10 normal periods. She has faithfully communicated with me at each period and assures me that she has no pain at all with the catamenia and that the only discomfort experienced has been the usual menstrual malaise. Not anticipating amelioration of the irregularity by the above surgical procedure, suitable glandular therapy was instituted immediately after the patient left the hospital. As previously stated, she has had 10 periods at about the usual 28-day intervals, and it may be assumed that this therapy has helped to establish a normal menstrual cycle.

## Discussion

Herein is presented a case of dysmenorrhea associated with a uterine anomaly. The relationship between the anomaly and dysmenorrhea is of course questionable, as many of these anomalies are "silent." However, in the absence of other lesions of the pelvic viscera, and with all conservative treatment of the accepted sort having failed to relieve the pain, it must be assumed that, in a measure, this patient had pain as a result of the anomaly described, and derived benefit from presacral resection.

Personal communications with surgeons elsewhere reveal little or no experience with this operation for relief of pain due to congenital uterine anomalies, and it is hoped that this report may stimulate an interest in this type of surgical approach.

## Summary and Conclusions

1. Presacral resection for pain presumably caused by congenital uterine anomaly is reported.
2. This case of uterus didelphys unicollis appears to be unique in being bilaterally symmetrical and because the tubes and ovaries, broad and round ligaments were entirely normal and also symmetrical.
3. Entire relief of severe dysmenorrhea presumably due to congenital uterine anomaly was obtained by division and resection of the superior hypogastric plexus (presacral nerve).

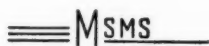
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- |                            |                           |
|----------------------------|---------------------------|
| Bloomfield, J. H., M.D.    | Irving, Fredrick C., M.D. |
| Browne, W. H., M.D.        | Jackson, James A., M.D.   |
| Cleveland, David, M.D.     | Lahey, Frank A., M.D.     |
| Crile, George, M.D.        | Lash, A. F., M.D.         |
| Curtis, A. H., M.D.        | Masson, James C., M.D.    |
| Danforth, W. C., M.D.      | Meleney, F. L., M.D.      |
| Davis, Loyal, M.D.         | Nadeau, Oscar E., M.D.    |
| DeLee, J. B., M.D.         | Peet, Max Minor, M.D.     |
| Erdman, John F., M.D.      | Pemberton, F. A., M.D.    |
| Falls, F. H., M.D.         | Schwartz, George, M.D.    |
| Greenhill, Joseph P., M.D. | Watson, B. P., M.D.       |
| Heaney, N. Sproat, M.D.    | Whipple, Allen O., M.D.   |
| Hillis, David S., M.D.     |                           |



## The Relationship of the Roentgenologist to the Physician and Surgeon\*

By Leon M. Bogart, M.D.

Flint, Michigan

LEON M. BOGART, M.D.

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■ ROENTGEN, when he discovered the x-ray in 1895, uncovered a hornet's nest. The doctor, secure in his fringe of scientific terms, was too close to the aura of empiricism to be jolted out of his toppling Galenic conception. Keen's "Surgery," published in the latter part of the 19th century, spoke of cholecystitis as being caused by tight lacing, but spoke very little of the disease itself. Tait, in the late seventies of the 19th century, doubted the wisdom of asepsis in sur-

gery. Osler's edition of 1905 has little reference to x-rays. Surgeons abroad early recognized its value, for in 1896 reports of surgical pathological lesions were described with x-ray findings. In 1907, in Dr. DaCosta's "Surgery," little reference was made to x-ray in the text, but in a discussion rather extensive mention is made of possibilities, also the advisability of mixing bismuth with food to visualize the gastro-intestinal tract was discussed.

The mysterious ray, piercing the depth of tissues and recording different density, not only brought out the silhouette of bone, but emphasized the necessity of physical comparison of shadows in physiology as well as pathology. When Cannon and Williams first gave an opaque meal, the innermost secrets of eternally covered unknowns were blasted open to the curious gaze of the delving scientists, as though it were the secrets of the solid undercore of the earth made available for scientific observation. When early reports of x-ray burns and x-ray epithelioma became known, the destruction of the tissues became a hunting ground for the investigator and research worker, to turn the flood of destruction to the nihilist cell—the cancer cell.

From the little flicker of the first gas jet vacuum tube emitting the unknown ray that man made and controlled, grew the precise tabulator of pathological processes of today.

Friedenwald, many years ago, brought to the attention of the roentgenologist the irregularity of the mucosa in gastric ulcer, and now this sign is coming into prominence with the improvement of the technique of rugæ visualization. The laboratory evaluation of gastric ulcer diagnosis has been greatly superseded by the x-ray findings, but here the surgeon must remember that often one is apt to read into the plate nonexistent pathology.

It is indeed a far cry from the full hour exposure required in the early days of x-ray to the present split second exposure with its exact delineation and clarity. The art of physical diagnosis and great personal error has largely given way to the penetrating ray. Yet we, as physicians and surgeons, by relying too much upon the trained interpretation of the x-ray findings, must not lose sight that the personal equation is not to be discounted, for the radiologists differ between themselves just as frequent-

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Read again by request May 21, 1941, before the Third Annual Fracture Clinic, given under the auspices of the Regional Fracture Committee of the American College of Surgeons and the Genesee County Medical Society, Hurley Hospital, Flint, Michigan.

ly as the physicians or surgeons. The plate is inanimate—the human mind reads its signs.

One of the most useful branches of radiologic technic, and one probably requiring most judgment, fluoroscopy has lent itself to be the most blatant instrument of the charlatan. Newspaper and radio advertisements are full of misconceptions of fluoroscopic values and the public is misled as to its possibilities. All of us, I am sure, deplore its misuse and hope the public can be educated to its limitations.

The importance of the x-ray in the diagnosis of tuberculosis and as a check-up of its therapeutics has been proved invaluable. The detection of metastases and emboli is another chapter of scientific detection greater than fiction. Of course the oldest service for which x-ray was used was the diagnosis of bone pathology and perhaps it is the one fraught with the most danger to the surgeon, because of the perfection expected in the treatment of fractures. The measurements and comparisons which the student of yore was taught are entirely disregarded by him now, yet in my judgment not to be discarded, for if length, alignment and natural contour be taken in consideration, especially in the young, seeming faulty position of bone fragments are still molded into position as in the days antedating the x-ray. It is noteworthy that the attending physician only too often expects the roentgenologist to be the all-round specialist of interpretation, a glorified scientific soothsayer, which, of course, is flattering but leads to a yoke of dependence.

The flat plate herring-bone appearance of acute ileus or the telltale gas bubble in a subphrenic abscess, with the characteristic elevation of the diaphragm admit of no dispute in the diagnosis if taken in conjunction with the history and clinical course. The pathognomonic appearance of pencil-like narrowing in regional ileitis and many other positive findings of the x-ray form the bulwark of the diagnostic aids to the surgeon. Lesions of the large bowel or the stomach need more than ordinary acumen to diagnose unless definite pathologic size has developed. The surgeon expects too much when he looks to the roentgenologist to find the above-mentioned lesions

in the initial stages, and negative findings should not deter the surgeon from proceeding with an exploratory operation. It is desirable to be able to localize early stages which do not show gross changes, and careful and minute study, will, in many instances, detect changes in the physiologic contour brought about by the microscopic changes. The contrast obtained by forced gas distention of the bowel lumen has made many early lesions possible of detection. Even the etiological factor can be told within a certain degree of accuracy, due to the predilection of specific pathologic lesions for certain parts of the alimentary tract or bones.

We have to recognize that frequency of x-ray determinations does something to the end of the fractured bones, which retards the formation of callus. X-ray signs of bone dissolution, destruction and regeneration require knowledge of normal anatomy and physiology first, and sequence as well as regional pathology. Early pathologic changes become apparent to the skilled roentgenologist, as an irritable duodenum or pylorus may be recognized before full clinical symptoms of gastric ulcer appear, or an impending Sudeck's syndrome may be prognosticated by the early and persistent atrophy of bone.

To Rowntree and Abel, Cole and Graham, Swick and others, we owe the demonstration of the selective absorption of radio-opaque dyes given orally or intravenously and its use magnificently demonstrated in their widespread application. It is not necessary to remind you of opaque substances introduced through the ureters and per urethra into the bladder and the introduction of an opaque solution into the bladder for determination of bladder malignancies, or as the author lately used it in determination of ruptured urinary bladder.<sup>2</sup> The use of radio-opaque oils or dyes to visualize spinal lesions and vascular pathology has been widely reported, requiring great skill and coöperation of roentgenologist and surgeon. The introduction of gas for ventriculograms also needs the teamwork mentioned above, and the use of ethylene instead of air seems to be gaining favor. The removal of the opaque dyes or oils used is of concern to both roentgenologist and surgeon, and is of great importance to the patient. The surgeon

must not forget that microscopic changes do not manifest themselves in an x-ray plate; therefore, osteomyelitis, malignancies, or early bone deposits are not recognized in the early initial stages, and when negative to x-ray must not be dismissed as absent. Localization of foreign bodies on the plate does not always spell a spectacular removal, for I admit many difficulties that I had to cope with, even after excellent x-ray localization.

I can only allude to the brilliant chapter written by roentgenology in the field of therapeutics, especially deep x-ray in pre- and postoperative care of malignancies, as well as the direct attack of the lesion. Many enthusiastic reports in the treatment of acute regional infections have come to the fore, especially in acute postoperative parotitis or thrombophlebitis.

Controlled injection of radio-opaque media into fistulous tracts as well as the visualization of the biliary tract and detection of hidden duct stones by means of the x-ray on the operating table is being put to more frequent use.

The physician and surgeon must educate the laity that a roentgenologist is not a photographer of structures. We know that the x-ray plate is a record of the normal and abnormal anatomy and physiology; its deciphering requires skill and training, requiring a great deal of time and perseverance.

Baetzer and Waters<sup>1</sup> state that the roentgenologist has four inseparable friends, the anatomist, pathologist, internist and surgeon, and I wish to add a fifth one, the physiologist. With them his work rises or falls. The physician and the surgeon should not shed their responsibility and expect the roentgenologist to make the diagnosis for them. The roentgenologist should be considered a highly skilled physician with whom his colleagues coöperate and coördinate as one of the important highways to reach the destination of a workable diagnosis and possible cure, and not the sun around which the medical and surgical diagnosis revolves.

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DECEMBER, 1941

## The Physiology of the Nose\*

By Dewey R. Heetderks, M.D.

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■ It is important that the rhinologist be familiar with reactions of the normal nasal mucous membrane to the various environmental conditions so that he may be better able to evaluate symptoms of which a patient may complain. Many persons in robust health complain of symptoms referable to the upper respiratory tract which on final analysis may be explained on a physiologic basis.

In 1926, the writer undertook a study<sup>4</sup> to determine the nature and extent of reactions of normal nasal mucous membrane. Throughout this study persons with apparently normal noses were observed. Ten persons in each of the first six decades of life were selected. The nasal membrane in every case was carefully observed in each of the atmospheric conditions so that a total of 240 observations were made. In selecting the conditions under which to observe the reactions of the nasal mucous membrane, an attempt was made to supply every possible relationship of temperature and humidity of the atmosphere which is ordinarily encountered.

Some of the results noted were as follows:

In moderate outside air with a temperature of from 13 to 18° C. and relative humidity of from 50 to 60 per cent, every subject showed slight swelling of the turbinates and the nasal secretions were scantily distributed over the mucous membrane. There was a correspondingly large breathing space. Apparently the least amount of work is done by the nose in such warm, moist air. The opposite extreme was observed in cold, damp air. In warm, but very dry air, the turbinates were considerably swollen though less than in cold damp atmospheres. It was thought the swollen tur-

\*Presented at the annual meeting of the Michigan State Medical Society, Detroit, September 26, 1940.

binates probably act as an adaptive reflex mechanism in preventing too free admission of the warm dry air.

When subjected to varying environmental conditions, the nasal mucous membrane showed a great variation in the rapidity of response in different individuals. In general, adolescents showed the most active mucous membrane. From adolescence until old age there was a progressive retardation in the response of this membrane.

#### Cycle of Reaction

In 1923, Lillie<sup>14</sup> called attention to the idea of a cycle of reaction in the nose. In 80 per cent of the subjects, this cycle was apparent, that is, the turbinates of one side of the nose were filling while those on the opposite side were throwing off secretion. This cycle did not always take place to the same extent. Cold, damp atmosphere prompted more pronounced changes than the less provocative environments. These cycles of reaction occurred over varying lengths of time ranging from 15 minutes to two hours.

Subjects were also examined in recumbent postures because of the common complaint of nasal obstruction on the dependent side at night. The lower side nearly filled or filled completely in every case in an average time of twenty-five minutes.

The nasal secretions seemed to bear a definite relationship to the congestion of the turbinal structures, that is, being more copious with swelling of the turbinates and vice versa. During adolescence, an age of physiologic activity, the nasal secretions were found to be abundant. In old age and advanced middle life, the secretions were much reduced in amount.

In about 10 per cent of the cases, there was definite debris about the fibrillæ of the nasal vestibules, and in at least half of the nasal cavities, the secretions contained fine debris. Every subject examined in the lower temperatures showed moisture in the vestibules. This moisture was never observed in warmer air and could be produced by exposing the subject to cold air for five minutes. The logical explanation of this fact is that cooling the expired air lowers its saturation point and some of its moisture must be condensed.

The conclusions reached from this study were:

#### 1. The nose has three definite functions

other than olfaction; to warm, moisten and filter the inspired air.

2. The mechanism is the mucous membrane, the available surface of which is increased by turbinal turgescence.

3. The nose reacts differently under various environmental conditions and at different ages.

4. Most noses show a fairly definite cycle of reaction.

5. The following symptoms need not be due to pathologic conditions and can readily be explained as physiologic responses; nasal obstruction in hot dry rooms; the watery nasal discharge in cold weather and during adolescence; the dropping back into the throat of secretions often containing debris, and obstruction of the nose on the dependent side.

#### Functions

Since making this study, many enlightening contributions have appeared in the literature on the function of the nose and its mechanism. Time permits a rather brief review of only some of these. Humidification and warming of the inspired air are important functions of the nose.<sup>20</sup> Humidification is essential to the processes of alveolar respiration. Light is also essential to the maintenance of the cilia and their protective mucous blanket.<sup>21</sup> Air laden with dust or containing bacteria is cleansed to a large extent in the nasal passages.<sup>3</sup> Hilding's<sup>6</sup> studies on drainage of nasal mucus will be referred to later.

Lehmann devised a simple but ingenious technique for measuring nasal filtering efficiency. He found the median average of nasal efficiency 46 per cent for normals and 27 per cent for silicotics. Tourangeau and Drinker<sup>26</sup> found efficiencies lower than those reported by Lehmann. They found practically no efficiency over 30 per cent and inferred from this that the dust filtering efficiency of the nose is too low to be of importance in preventing fine dust from reaching the lungs.

Lehmann<sup>13</sup> did some interesting work to show the significance of dust filtering efficiency in the development of silicosis. This dust absorptive ability of the nose he found to vary widely. When low, the subject could work but few years if he were to avoid silicosis. When high, the worker seldom gets the disease even though employed many years in this dusty environment.

### Mucus Secretions

In recent years many interesting investigations have been made on the mucous secretions of the nose. Its source is the goblet cells and mucous glands of the nasal membrane. With these two type of glands in operation, Leasure<sup>12</sup> believes quite a variety possible in the quality of the nasal secretions present according to which type of gland is more active.

Tweedie,<sup>27</sup> Mittemeier,<sup>17</sup> Buhrmester<sup>1</sup> and Hilding<sup>7</sup> have made important contributions in regard to the pH of nasal mucus. Their findings have varied, some reporting the pH to be acid and others alkaline, with resulting confusion. It remained for Peterson<sup>18</sup> to clear up these discrepancies this past spring. He studied the nasal mucus in relation to environmental change and to other changes occurring in the organism. He pointed out that single readings taken at different times mean little or nothing. He therefore carried out this observation in day-to-day fashion on a number of subjects.

The pH of the normal membrane was changing constantly. They found that there is a distinct diurnal rhythm, there is a distinct rhythm associated with gastro-intestinal activity corresponding to the intake of major meals and there is a meteorological rhythm. PH curves were charted and below each the curve for the bacterial count of a circumscribed area of the mucous membrane. There was a constant change in the bacterial population as it fluctuates with the physiological state of the mucous membrane. For example, when weather gets colder, the pH increases; that is, the mucus becomes more alkaline and the bacterial count rises sharply. When weather gets warmer, the reverse takes place indicating that acid mucus inhibits the growth of organisms<sup>2,19</sup> (Fig. 1).

The destruction and removal of bacteria from the nose is not entirely mechanical, but is also antiseptic. This work is done by an enzyme normally present in the nasal mucus which is a powerful antiseptic.<sup>8</sup> Hilding<sup>9</sup> found this lytic power is reduced in the first two days of a cold.

### Drainage

The drainage of nasal mucus was studied by Hilding.<sup>6</sup> Because of its importance, some of his findings will be briefly reviewed. The film of nasal mucus extends like a continuous membrane over all the nasal surface. This film is in

continuous motion throughout its extent. The rate of motion varies in different regions. The greatest rate is generally found in those areas best protected from the force of the inspired air, that is, in the meati. The mucous film of blanket

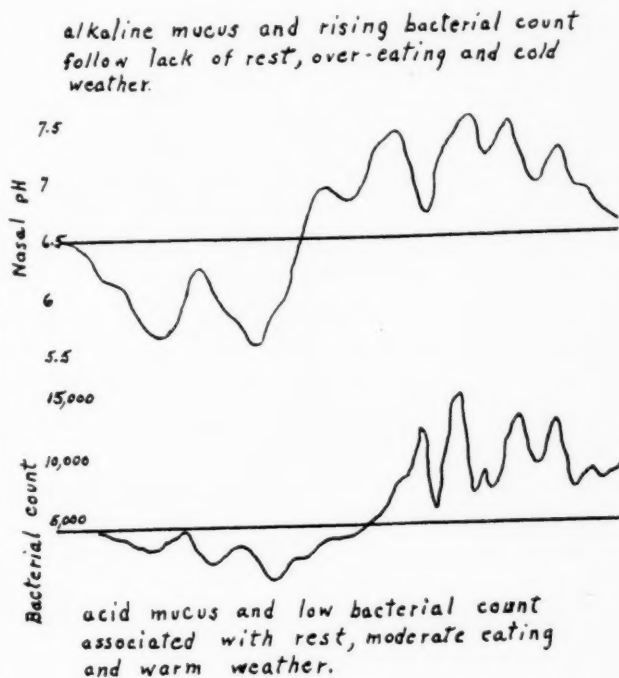


Fig. 1.

is motivated by four forces: (1) by the ciliary activity directly, (2) by gravity, (3) by traction due to cilia, and (4) by traction from the pharynx as in swallowing.

The mucous membrane of the anterior one-third of the nose is relatively inactive due to lack of cilia. The drainage of mucus from this area is different from the rest of the nose. Drainage is slow and is accomplished by traction of the secretions on the inactive membrane by ciliary movements in the adjacent active membrane. In other words, it is dragged as a net. Because of the slow drainage in this area, dust and cosmetics are often seen whereas the remainder of the nose is clean. At least an hour is required to remove particles from the anterior one-third, but only five to ten minutes will suffice for the posterior two-thirds. Hilding in a single sentence gives a rather comprehensive picture of the mucous film, "the layer of secretion covering the surfaces is at once a protective blanket and endless conveyor, a medium for ciliary action, an impervious barrier to bacteria and a trap for them, a drag-net to sweep clean the non-

ciliary spots, a humidifier, a diffusion medium and a lubricant" (Fig. 2).

The cilia within the nose are the chief agent in maintaining the normal clearance of the nasal cavity. All epithelia of the nose are modifications

including their secretory and ciliary activity is regulated and controlled through the autonomic and afferent nerves.<sup>11</sup> It is interesting to note that the cavernous or erectile tissue in the nasal mucosa does not always conform to the vascular

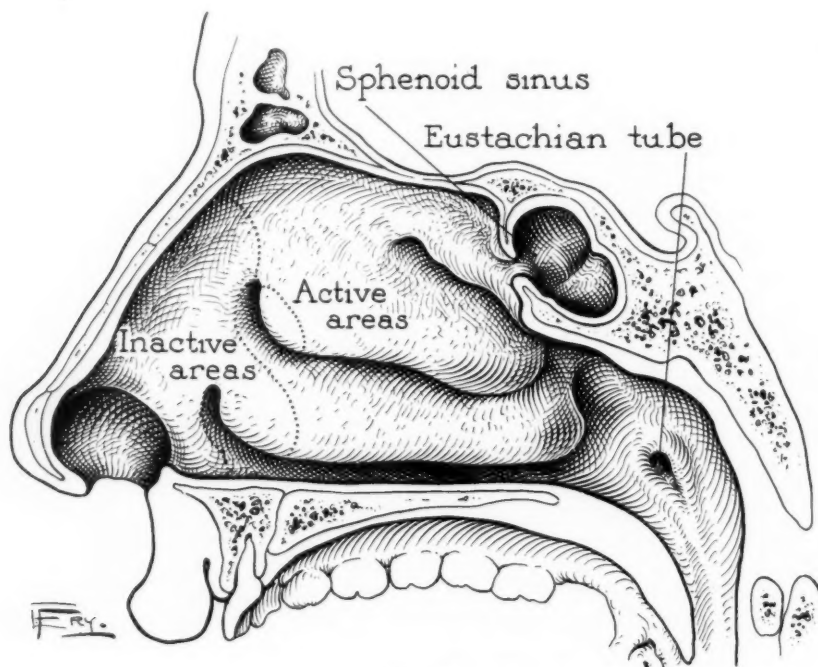


Fig. 2.

of one type, that is, ciliated epithelium. Modifications are caused by varying degrees of exposure to in- and out-flowing air.<sup>8</sup>

Lucas and Douglas<sup>15</sup> found that the so-called mucous film or sheet is composed of two parts: an outer stratum of viscid mucus which rests on the tips of the moving cilia and an inner fluid layer of low viscosity, which forms a suitable medium for the vibrating cilia. The inner layer flows with the vibrating of the cilia, but the outer viscid layer may or may not respond to the beating of the cilia against its under surface.<sup>16</sup>

Ciliary activity is autonomic with the cell, it may be a sympathetic nerve influence, but is not proved. It varies some with temperature, the optimum being between 28 and 33 C.<sup>22</sup> Although the cilia serve as a first line of defense they must not be regarded as weak and frail as pointed out by Heine.<sup>5</sup> A single dose of unfiltered roentgen ray of eight erythemas is the maximum for the skin of man. However, the evidence points toward the fact that these frail-appearing cilia will stand three times such a dose with impunity.

The functional state of the mucous membrane

state of the adjacent mucous membrane, although its blood vessels and those of the adjacent mucous membranes are innervated by the same nerves. Various investigators,<sup>10</sup> particularly Sternberg, have called attention to the fact that engorgement of the cavernous tissue frequently takes place while the mucous membrane is relatively ischemic and that not infrequently it contracts while the mucous membrane is markedly hyperemic. The explanation lies in the fact that the capillary bed in cavernous tissue is interposed between veins whereas the capillary bed in other parts of the nasal mucosa is interposed between arteries and veins. In view of this arrangement, reflex stimulation which elicits vasoconstriction in the nasal mucosa might prevent emptying of the capillary bed in the cavernous tissue by contraction of veins into which it drains.

Clinical observations as well as medical literature forces one to recognize the interrelationship between the nose and the rest of the body. This was pointed out in Peterson's findings regarding the rhythm of the pH of nasal mucus associated with gastro-intestinal activity. The nasogenital

relationship has also been definitely established. Mortimer and his associates found that the nasal mucous membrane of pregnant women showed increased redness and swelling in the later stages of pregnancy. Mackenzie and subsequent observers have confirmed the view that in a certain percentage of normal women there is hyperemia and swelling of nasal mucosa during menstruation. Many reports have been made associating nasal stuffiness and sneezing with acts of copulation and sexual excitement.<sup>23</sup>

### Effect of Chilling

Some very important studies have been made on the effects of chilling of body surfaces. Experiments were made with fans, cold H<sub>2</sub>O and ice with fairly uniform results.

Taylor and Dyrenforth<sup>25</sup> have shown that cold water takes heat from the body twenty-seven times faster than air. Individuals in cold H<sub>2</sub>O without exercise may manifest a drop of over 10 degree F. in the nose, often with consequent colds.

Visscher and Spiesman<sup>24</sup> point out that a change in temperature of only two or three degrees in the mucous membrane of the nose means a marked alteration in blood flow that produces such a fall of temperature.

A fall of even one or two degrees may mean that there is an absolute anemia of the mucosa and consequently a lack of oxygen which is extremely favorable for the growth of pathogenic organisms. The cardinal factor in avoiding upper respiratory infection is the maintenance of a constant average temperature in the nose because any considerable degree of deviation from this average for appreciable periods of time will result in morbid changes.

Undritz and Sassassow<sup>28</sup> also studied the effect on the nasal mucous membrane resulting from cold applied to the skin. They concluded that the cooling of the nasal membrane depended not only on external cold applied, but also on the constitutional make-up. The decrease in nasal temperature lasts much longer than the cold applied externally, but this time factor was subject to great variation.

The interactions between the splanchnic and peripheral circulation serves to explain why the nasal mucous membrane becomes anemic during these experiments. The autonomic status of the circulation of the abdominal and pelvic organs is opposed to that of the extraperitoneal organs and

tissues. As a result of this relationship, the autonomic status of the respiratory mucous membrane corresponds to that of the skin. If the body is exposed to low temperatures, particularly in the absence of muscular activity, the skin becomes relatively ischemic owing to peripheral vasoconstriction. Since the autonomic orientation of the respiratory mucous membrane corresponds to that of the skin, they also become ischemic.

### Summary

In summarizing, one is impressed with the ingenious and complex mechanism of the nose. This mechanism functions in ordinary environments with remarkable efficiency. It is, however, affected adversely by any form of cold applied to the body, especially when not exercising, a consideration most important in the prevention of colds. The vasomotor activity of the nose varies not only with different environments and emotional factors, but also with the age and constitutional make-up of the individual.

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## The Successful Use of Sulfanilamide in the Treatment of Blackwater Fever

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■ BLACKWATER fever is not an unusual condition in the malarial districts, but to encounter a case in Northern Michigan, however, is quite surprising. This case presented several phases which seem unusual enough to warrant this report. Search of the medical literature reveals no reported cases which have been treated with the sulfanilamide group. Several reports on the use of these drugs in ordinary malaria have been recorded in the past three years. Hill and Goodwin have reported one hundred cases of malaria treated with sulfanilamide with excellent results.

Blackwater fever or malarial hemoglobinuria is generally considered to be one clinical manifestation or malignant form of malaria. Most authorities believe that the estivo-autumnal parasite is usually present. In this condition the red cells are dissolved or hemolyzed, and the hemoglobin is liberated into the blood stream. The destruction of red blood cells may be so extensive that the liver, spleen, and other organs that normally take care of the hemoglobin from worn-out or dead cells are unable to do so and the excess amount of hemoglobin is excreted by the kidneys in such quantities that the color of the urine becomes red, and may be in such quantity as to give the urine a black color—hence the term “blackwater.”

The onset of blackwater fever generally begins with a chill, followed by a high temperature, great prostration, thirst, vomiting, abdominal distress, aching loins, and great tenderness over the

acutely enlarged liver and spleen. The patient rapidly becomes jaundiced, and the urine that is passed varies in color from red to black. The red count and hemoglobin may drop rapidly to very low levels. Death occurs in about twenty per cent of the cases. Anuria is the most dreaded complication and the outcome is usually fatal.

No specific treatment has been proved to be of value. Quinine is usually withheld or given with caution as it may contribute to the hemolysis. Rest, good nursing care, parenteral fluids, and blood transfusions all are of value. Many drugs of questionable value are advised, such as—alkalies, adrenalin, caffeine sodium benzoate, atabrine, snake venom and neo-arsphenamine. No reports of the previous use of sulfanilamide have been found.

### Case Report

E. S., a thirty-six-year-old white woman, was admitted to Mercy Hospital, Cadillac, Michigan, on November 28, 1937, complaining of chills, fever, and passage of black urine. She had been a foreign missionary for eight years, going to French Equatorial Africa in 1929. She returned to the United States in 1931 for one year. From there she had gone to Paris, France, for a year's study. She had returned to Africa in 1934, remaining there until June, 1937, when she came back to America.

She had the first attack of malaria in Africa in 1930. She had taken 5 grains of quinine daily upon arrival in Africa and had continued quite faithfully. However, after neglecting this for a week she developed chills and fever in 1930. This lasted three days and was easily controlled with quinine. In December, 1934, she had another slight attack which responded quickly to quinine. One year later she had another mild attack of malaria. While on the boat returning to America in June, 1937, she again had chills and fever. Following this she took quinine, five grains daily, more or less irregularly for two months.

Other than these attacks of chills and fever, the patient noted no symptoms until three months before admittance, when she developed tinnitus and weakness. She was also told by her friends that they had noted a gradually increasing pallor of her skin.

In August, 1937, she had an attack of pain in the lower abdomen for which she was kept in bed for two months.

The present attack began on November 22, 1937, six days previous to admittance, with slight chills and fever, which persisted daily until November 27, 1937, when she had a severe chill and first noticed the passing of black urine. This had cleared up but the next day she had another chill with a temperature of 105 degrees and again passed dark urine. On admittance to the hospital that evening she had another chill and

## BLACKWATER FEVER—HOLM

complained of nausea and vomiting, extreme thirst, and pain in the right upper abdominal quadrant.

Inventory by systems revealed little of significance. There was no history of other previous illnesses. Menstruation had begun at sixteen. Her periods had been regular, occurring every four weeks and being moderate in amount until ten months ago, when they became profuse and occurred every three weeks with pain in the lower abdomen during menstruation.

*Physical Examination.*—On admittance examination revealed a rather thin, white woman of about thirty-five years of age, with marked pallor and a pale lemon yellow color of the skin and scleræ. She was evidently acutely ill although well oriented and coöperative.

Temperature 106.4 degrees. Pulse 110. Respirations 28. Her pupils reacted normally. Scleræ were icteric. The mucous membranes and conjunctivæ were very pale, without petechiæ. Mouth was normal. There was no thyroid enlargement. Her chest was clear and resonant throughout. The heart borders were well within normal limits but a systolic murmur was present at the apex and over the pulmonic area. Rhythm was regular, rate 110. The abdomen was soft and flat. The liver edge was felt one hand's breadth below the costal margin, was very tender, not nodular. The spleen was markedly enlarged and extended five inches below the left costal margin. There were no other masses or tenderness, or costovertebral tenderness. Pelvic examination revealed a nulliparous introitus, hymen intact; cervix pointing down and anteriorly was freely movable. No adnexal enlargement or tenderness. Neurological examination was negative.

Laboratory examinations of the blood on admittance were as follows: red blood count 890,000, white blood count, 4,300, hemoglobin 25. Smear of blood showed no malarial parasites. A differential count showed juveniles 4, stab 36, segmented 24, small lymphocytes 3, large lymphocytes 10, monocytes 19, degenerated cells 1, irregular lymphocytes 3. Red blood cells were swollen, with a few microcytes, a few hyperchromic and hypochromic cells. The icterus index was 100. Vandenberg reaction was indirect. Blood culture was negative.

*Course in Hospital (first three weeks).*—Twelve hours after admittance the temperature went up to 108.4 degrees axillary, but came down to 99 and 100 degrees for the following three days. Then she again had rigors with high fever nearly every day. The urine remained black. The red count was brought up by frequent blood transfusions but soon fell again to extremely low levels. Patient complained of abdominal distress, nausea, weakness, and palpitation. Delirium was quite marked after the severe rigors. On December 17, 1937, she appeared to be dying. She was cyanotic, comatose and pulseless at times. Her face and hands were edematous.

*Summary of Laboratory Work.*—Blood Kahn was negative. Icterus index 100. Agglutination tests for typhoid, paratyphoid and undulant fever were negative.

DECEMBER, 1941

Date	Red Blood Cells	Hemoglobin %	Highest Temperature	Chills	Color of Urine
11-28-37	890,000	25	108.4	x	black
11-30-37	1,300,000	28	101.0		amber
12- 1-37	970,000	26	101.8		amber
12- 2-37	1,840,000	32	103.8	x	black
12- 3-37	1,550,000	30	103.8	x	dark red
12- 4-37	1,640,000	38	103.2	x	black
12- 6-37	1,310,000	32	106.2	x	black
12- 7-37	1,290,000	25	105.8	x	pale red
12- 9-37	1,200,000	21	102.0		straw
12-11-37	1,330,000	25	103.8	x	amber
12-13-37	1,720,000	34	104.8	xxx	black
12-14-37	1,260,000	30	105.8	xx	red
12-16-37	870,000	16	102.8		black
12-18-37	650,000	10	101.8		red
12-18-37	Prontosil started	.....	.....	..	.....
12-20-37	610,000	10—	99.8		red
12-22-37	860,000	10+	99.6		red
12-24-37	1,530,000	35	100.0		amber
12-26-37	1,790,000	37	99.2		straw
12-28-37	1,630,000	38	98.6		straw
12-30-37	1,850,000	40	98.6		straw
1- 4-38	2,280,000	42	98.6		straw
1- 8-38	2,340,000	46	98.6		straw
1-12-38	2,000,000	47	99.0		straw
1-24-38	2,810,000	50	98.8		straw
1-31-38	3,070,000	53	98.0		straw
2-13-38	4,080,000	60	98.0		straw
2-25-38	4,100,000	64	98.0		straw

Daily blood smears were negative for malarial parasites except on November 28, 1937, and on December 7, 1937, when estivo-autumnal organisms were found. Blood cultures were repeatedly negative. Blood sugar was 88 milligrams per 100 cubic centimeters. Blood non-protein nitrogen was 53 milligrams per 100 cubic centimeters. The feces were repeatedly negative for ova or parasites. The urine was consistently reddish purple or black in color. The red count and hemoglobin are recorded in Table I. The white count varied from 2,000 to 6,000.

*Summary of Treatment (first three weeks).*—Two thousand to four thousand cubic centimeters of intravenous saline and glucose were given daily. On November 30, 1937, atabrine was started and 1.5 grains given three times a day for fifteen doses. On December 2, snake venom in increasing doses was given daily. Intramuscular liver extract and ferrous sulfate with vitamin B were given daily. Caffeine sodium benzoate, 7.5 grains twice daily, and adrenalin m. X whenever needed for sixteen days. Quinine, 5 grains three times daily, was started on December 11, but discontinued after two days. Six thousand cubic centimeters of citrated blood from thirteen donors were given at intervals during the first three weeks. Cold wet packs were used for hyperthermia and external heat applied with the chills. Constant special nursing care was provided. A few doses of sodium thiosulfate were given intravenously. Nembutal was given for restlessness.

*Later Course.*—On December 18, the red count was 650,000 with a hemoglobin of 10. The urine continued to be reddish black. Because of the fact that the patient was obviously terminal and had failed to respond to any of the recognized forms of treatment, I decided to give sulfanilamide. This had been considered before but withheld because of the fear of further aggravating the severe anemia. Therapy with 20 cubic centimeters of prontosil every four hours was instituted with almost miraculous response. The temperature dropped to normal and remained normal thereafter, and all the previously described signs disappeared. In two days the patient became rational and was able to take sulfanilamide by mouth, this being given in doses of 15 grains four times daily for three days and then reduced to 10 grains three times daily. There was no more black urine, although it was discolored from the prontosil. The red count increased rapidly without any further transfusions. She was given ferrous sulfate with vitamin B in the form of hematinic plastules. The liver and spleen gradually diminished in size and the jaundice cleared up.

She continued to be nauseated, however, and developed attacks of severe pain in the right upper abdomen referred to the right shoulder blade which required frequent doses of morphine for relief. On December 29, x-rays showed non-visualization of the gall bladder after oral dye. A diagnosis of gall-bladder disease with stones was made. She was given dehydrocholic acid with atropine and a high fat diet for a week, but the attacks became worse on this regime. On January 19, 1938, her red count was up to 2,630,000 and hemoglobin 47. She was taken to the operating room and under nitrous oxide anesthesia the gall bladder was explored through a small subcostal incision. The gall-bladder wall was somewhat thickened; the mucosa had a strawberry appearance. It was filled with dark brown bile and contained six or eight faceted soft, brown gall stones. The stones were removed and the gall bladder was drained. It was felt that these stones were probably the result of the extreme concentration

of blood pigments from the hemolytic anemia rather than the result of gall-bladder infection. Considering the general condition of the patient, a cholecystotomy seemed preferable to a cholecystectomy.

Her postoperative course was uneventful. She was up in two weeks and on February 13 she was discharged from the hospital. Her red count at that time was 4,080,000 with a hemoglobin of 60. She felt fine. She was instructed to take quinine, 10 grains daily, and continued to take ferrous sulfate.

She has been under observation intermittently since that time. There have been no recurrences of the symptoms of malaria or gall-bladder disease. In February, 1939, she again left for French Equatorial Africa to continue as a missionary, and several reports reveal that she is in good health.

### Comment

The interesting features of this case are the occurrence of blackwater fever, a tropical disease, in Northern Michigan, the unusually high temperature 108.4 degrees axillary, the extreme anemia, the dramatic response to prontosil and sulfanilamide in an obviously terminal patient, and the removal of blood pigment stones from the gall bladder.

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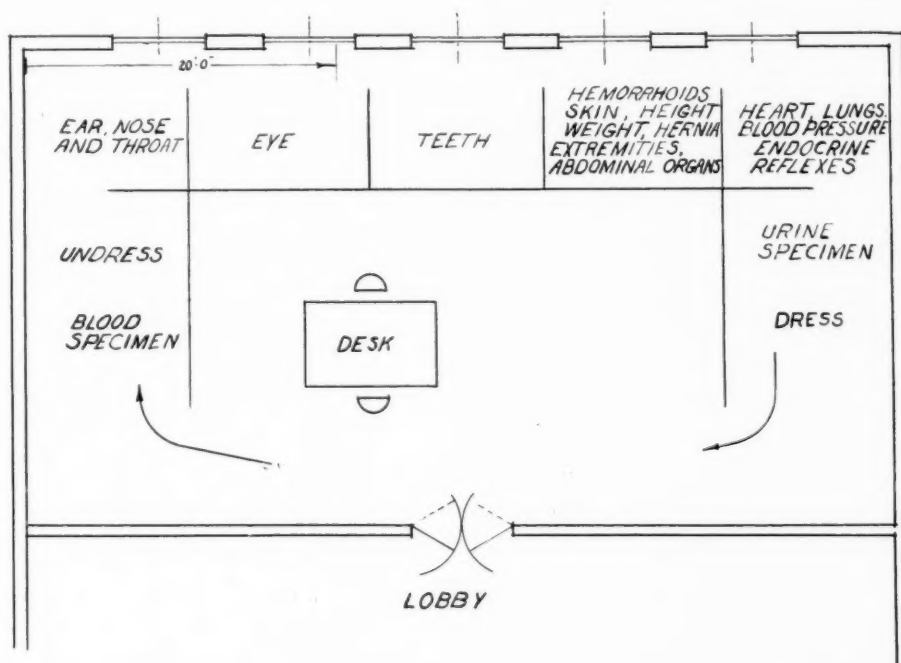
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## Examination of Selectees as a Society Activity

The Tuscola County Medical Society has been conducting group examinations of registrants under the Selective Service Act as a Society activity. The manner in which these examinations are being conducted appears to be somewhat unusual and therefore worth while reporting.

divided into three groups of four, each group acting as an examining unit. The secretary has acted as a sixth examiner with each unit.

The Medical Superintendent of the Caro State Hospital for Epileptics offered the use of the gymnasium of the institution recreation building as an examining center and the facilities of the institution laboratory for urinalyses. All blood specimens are sent to the Michigan Department of Health Laboratory for routine Kahn



Prior to May, 1941, the examinations for the Local Board had been done by three Caro physicians. With the death of one of these physicians, the two remaining found it impossible to examine enough men to fill the county's quota for induction into service. The members of the Local Board approached the officers of the Society and, after obtaining their approval, interviewed the individual members to ascertain their willingness to serve as examiners for the Board. The response was unanimous. The names of the younger members were then submitted by the Board to Governor VanWaggoner for approval; all names submitted were approved.

Because of his central location and proximity to the Draft Board office, the secretary of the Society was designated as the chief examining officer. The dentists of the county have cooperated splendidly, one working with each unit in a group examination; several have assisted more than once. The examining physicians were

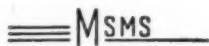
tests. Examining booths along the windowed side of the gymnasium are formed by suspending sheets from overhead wires. Each physician works in the same booth at all examinations. The accompanying diagram explains the physical set-up. Registrants wait in the lobby until called for examination.

The secretaries of the Local Board and of the Society arrange the dates of examinations. The secretary of the Local Board sends the "Official Notice to Appear for Examination" to a group of between forty-five and fifty registrants. At the same time the secretary of the Society notifies the members of a unit that an examination will be held. The examining units work in rotation. Each unit completes its work in a half day and it has not been necessary for any unit to appear more often than once a month.

As each registrant enters the gymnasium, he is assisted in filling out the questions on the first page of the examination form. At this time a

psychiatric evaluation of the registrant is made. He then passes to the first booth. Here he disrobes and the blood specimen is taken. Carrying his examination blanks and clothes with him, he is examined in each booth in turn. At the last booth, a urinalysis is obtained and the blanks collected. Three male attendants from the institution have assisted with the taking of blood for Kahn tests, removal of impacted wax from ears, and the collection of urine specimens. As each examiner completes his part of the examination, he makes a penciled note in the margin, classifying that portion of the examination as IA, IB, or IV. He is familiar with the Selective Service standards for his particular examination and his notation is a valuable timesaver to the chief examiner in completing the forms when the results of the urinalyses and Kahn tests are available. The completed forms are returned to the secretary of the Local Board.

The members of the Local Board have been very enthusiastic over this plan. It allows them to consider large groups of registrants for final classification at one time and makes their meetings, with absence from their regular occupations, less frequent. Thus far, none of the physicians or dentists has objected to spending the time requested; their coöperation has been very gratifying to the Society officers. The percentage of rejections at the Army Induction Station has been low. Of the last group of thirty-nine sent to the Induction Station, there were five rejections. Three had been referred to the Medical Advisory Board and passed by that body. One was rejected because of "acute anterior urethritis (gonococcic) of three days duration." The fifth, a registrant with rheumatic heart disease, represents the only real failure of the examining group. Needless to say, this record of efficiency is pleasing to all concerned.



#### PLASMA TRANSFUSION ABOARD SHIP SAVES "KEARNY" CREW MEMBER'S LIFE

How blood plasma, donated by an unknown American through his local Red Cross chapter to the Army and Navy Blood Plasma Bank, was used on the torpedoed destroyer *Kearny* to save the life of a seriously injured

sailor, is told in a statement issued by the United States Navy Department, November 4. While the destroyer was still limping into port, a series of three transfusions was performed with plasma flown from shore-based supplies by a patrol plane and parachuted into the water from where it was rescued and taken aboard the *Kearny*. The statement issued by the Navy Department follows in full:

"Blood plasma taken from the bank being raised by donations which citizens of the United States are making to the Navy through the American Red Cross was credited today with saving the life of Leonard Frontakowski, Chief Botswain's Mate, USN, one of the 10 men injured when the USS *Kearny* was torpedoed on the night of October 16-17.

"The plasma, delivered far at sea by a Navy patrol plane, was used in three transfusions which a Naval surgeon administered in a dramatic operation performed aboard the damaged destroyer as it limped to port after being hit by a German submarine.

"Frontakowski, whose home is at 370 Hamilton Ave., Norfolk, Va., was not injured in the torpedo attack itself, but was hurt seriously when struck by a lifeboat which was torn from its moorings and swept across the deck of the ship as the damaged destroyer rolled in the rough North Atlantic seas.

"The ship's 'sick bay' had been wrecked by the torpedo's explosion. However, Frontakowski was carried to the ship's after-dressing station where first aid was administered by an unidentified Pharmacist's Mate.

"Meanwhile, another destroyer was on its way to assist the *Kearny* and when she arrived 18 hours after the submarine attack, Lieutenant (junior grade) R. W. Rommell, Medical Corps, U. S. Naval Reserve, a resident of Oneida, New York, was transferred to the *Kearny* in a motor whale boat to attend the injured men.

"Soon after Dr. Rommell's arrival, a patrol plane, which had put out from a shore base, reached the scene and dropped a package of blood plasma, wrapped in waterproof covering, on the sea beside the second destroyer. It was recovered and taken aboard the *Kearny*.

"Dr. Rommell used the blood plasma to give Frontakowski three transfusions. The sailor's condition, which had been considered very grave, began to show steady improvement.

"Frontakowski is recovering at a service hospital in Iceland now and is believed to be out of danger.

"Surgeons at the Navy Department pointed out that the plasma used in saving Frontakowski's life far out in the North Atlantic may have come from a donor in any of several inland states, and emphasized the importance of everyone joining in the drive to provide the blood plasma needed to equip ships of the fleet.

"Approximately 20,000 donations have been made to the Red Cross, and of these 9,000 have been processed and turned over to the Navy and 6,000 to the Army. It is estimated that at least 100,000 units are required for each branch of the service to meet ordinary peacetime needs.

"Persons interested in making contributions to the blood bank are requested to contact chapters of the American Red Cross participating in the program."

Active blood collecting projects are now sponsored by Red Cross chapters in the following cities: Washington, Baltimore, Philadelphia, New York, Buffalo, Rochester, and Indianapolis. A number of other chapters are now completing plans for collection projects in their areas, the Red Cross announces.



## President's



Page



## The Season's Greetings

My Sincere Wish to all members of the  
Michigan State Medical Society for a

MOST HAPPY HOLIDAY SEASON!

May the New Year bring an abundance  
of health and courage to each and every  
doctor of medicine so he may perform the  
daily tasks assigned to him and do his part  
in solving problems which face him individ-  
ually and as a member of an important  
group.

*Henry R. Carstey*

President, Michigan State Medical Society

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★ EDITORIAL ★

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### MEDICAL PREPAREDNESS IN MICHIGAN

■ MICHIGAN is faced at once with the procurement of one hundred medical officers for the armed forces of the United States. That is not all. In the possible near future, the quota for Michigan will be seven hundred more medical officers. This amounts to about eighteen per cent of the practicing physicians in the state. In a medical society of one hundred members, eighteen of them may be needed to fill Michigan's quota.

The United States is developing a medical corps of over eleven thousand medical officers. This compares with some twelve hundred a very few years ago. At the present time the age limit for physicians with no army training is thirty-five years. Undoubtedly, many of the younger men will apply for commissions but it is questionable that there are eight hundred physicians in Michigan under thirty-five years who are available. It is probable the age limit will be raised.

In order to make the service attractive to the older and more trained men, the Preparedness Committee of the A.M.A. has been asked to recommend higher initial commissions for medical specialists and higher pay arrangements with more efficient use of present medical officers. (According to an administrative medical officer some of this inefficient use of the doctors in service is due to their own lack of executive ability.) An additional recommendation by the state committee is that certified specialists should be given initial rank of Major.

A further activity of the state committee will be to prepare and arrange the collection of a questionnaire which will be filled out by each County Preparedness Committee. The data in this questionnaire will enable the state committee to have a comprehensive knowledge of the distribution and availability of physicians should a national crisis become apparent.

Other aids for encouraging commissions of medical officers are requests to the hospital administrators that they encourage interns, resi-

dents, and staff members under the proper age to apply for commissions in the Medical Reserve Corps and that medical students be encouraged to seek appointments in the Medical Administrative Corps.

There is, at present, an understanding between the Selective Service, the Military Forces and the colleges that any medical student, once accepted in a reputable medical college, may be commissioned in the Medical Administrative Corps and then will not be called to active duty until after completion of his medical education.

The deans of the medical schools also have been asked to avoid the certifications to teaching positions of doctors under the age of thirty, and also to discontinue requesting their deferment in the draft.

A difficult problem and much labor await the Medical Preparedness Committee but they seem to have started the solution with a sound understanding of the needs and a desire for fair treatment to doctors of medicine.

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### YOU HAVE THE FACTS

■ A LETTER sent to each member of the Michigan State Medical Society on November 15, 1941, by the Executive Committee of The Council presented a very informative report on Michigan Medical Service.

Perhaps most important was the news that the Board of Directors of Michigan Medical Service has finally found a trained insurance man capable of managing the administration of the program. For many months contacts had been made but fulfillment was impossible for one reason or another.

Two paragraphs of this letter are especially worthy of note:

"Surgery in the general population runs only 40 cases per 1,000 whereas surgery with Michigan Medical Service groups has been running to 139 cases per 1,000. This experience in the

first six months of newly-enrolled groups, taxes severely the reserves of Michigan Medical Service but incidentally reveals that  $3\frac{1}{2}$  times more operations are performed under the M.M.S. program than are performed in the general population."

This surely demonstrates that the additional amount of service created under this budgeting plan should tend toward a more healthy population and an increase in the amount of preventive surgery.

The other paragraph to be quoted needs no comment. It is a sermon in itself.

"It must be appreciated that Michigan Medical Service is a young corporation and that perfection can only be had through a process of evolution. Its initial development was occasioned by a consumer demand for a program protecting the low-income workers against catastrophic illness. This demand will have to be met; either by coöperative efforts of the medical profession, or by political or social agencies. Would a political or social program be consistent with the democratic practice of Medicine and preserve its tradition?"

#### MERRY CHRISTMAS

■ IN extending the greetings of Christmas to every member of the Michigan State Medical Society, the officers and councilors review with gratification the accomplishments of the past year. Organized medicine in Michigan has kept pace with scientific advancement, while at the same time meeting and solving its ever-increasing social and economic problems.

Looking to the year 1942, a period of even greater service by the medical profession to the citizens of Michigan is anticipated—a service developing better health and prosperity to all, epitomized in the sincere greeting, "A Happy New Year."

#### WRITE ON THYMUS TREATMENT

"Treatment of Successive Generations of Rats with Thymus Extract and Related Substances," a summary of two years' research in the anatomical laboratories of the Wayne University College of Medicine, is published in the current issue of the nationally circulated journal, *Endocrinology*. Prof. Warren O. Nelson and Instructor Albert Segaloff of the College staff are the authors.

The Wayne study was aided by grants from the Committee on Scientific Research of the American Medical Association and the Works Project Administration.

DECEMBER, 1941

## You Are Going to Pay More Taxes

By Hazen J. Payette, LL.B.

*This article on Income Taxes is the first in a series of two written especially for THE JOURNAL of the Michigan State Medical Society by Mr. Payette, a member of the Detroit Bar, out of a wealth of experience with the Internal Revenue Code.*

ON September 20, 1941, at 12:15 p.m. E.S.T. the Revenue Act of 1941 became effective. While this was not a complete new act but merely amendments to the Internal Revenue Code, all payers of income tax in prior years will be affected by it as well as hundreds of thousands of persons who heretofore have escaped the payment of income taxes.

In attempting to comment on income taxes for 1941, I am mindful of the fact that additional tax acts will probably be passed either in 1941, or in 1942 and made retroactive to one's 1941 income. What these changes will be it is impossible to guess and therefore this article is based on the above mentioned Act. In addition, certain suggestions are made which might prove beneficial to one's tax position if acted upon this year.

The present Act is not the so-called "Administration Tax Bill" although it does contain some of its provisions. Numerous provisions were eliminated to expedite its passage with the promise that a subsequent bill would be introduced which would provide additional revenue. The present Act will yield slightly in excess of \$3,500,000,000.

This discussion of the Act is directed primarily to the medical profession and will not touch on the new or increased corporation, excise and excess profits tax. In passing, however, it might be well to mention that material increases have been made in estate and gift taxes (in some instances the new estate taxes represent an increase of 424 per cent) and while the new rates on gift taxes do not become effective until 1942, the estate taxes will be collected as of the effective date of this Act.

Although the amendments to the Act affecting 1941 income are not numerous in comparison, they are vital in that they generously affect the amount of tax one will pay. Those changes can be summarized as follows:

## TAXES

(a) Integration of 10 per cent defense tax into basic surtax.

(b) Reduction of personal exemption for married persons from \$2,000 to \$1,500.

(c) Reduction of personal exemption for single persons from \$800 to \$750.

(d) Restriction in the allowance to the head of a family on the first dependent in certain cases.

(e) Increased surtax rates.

(f) Optional returns.

(g) Optional reporting of increment on U. S. Savings and Defense Bonds.

(h) Lowering of minimums on Information Tax returns.

### Who Must File a Return

The Act contains these provisions:

The following individuals shall each make under oath a return stating specifically the items of his gross income—

(1) Every individual who is single or who is married but not living with husband or wife, if having a gross income for the taxable years of \$750 or over.

(2) Every individual who is married and living with husband or wife—if (A) such individual has for the taxable year a gross income of \$1500 or over, and the other spouse has no gross income; or (B) Such individual and his spouse each has for the taxable year a gross income and the aggregate gross income is \$1500 or over.

Even though a single person may have the status of "head of the family" with one or more dependents, he would still have to file a return if his income was \$750 or over; a married person having a gross income of over \$1,500, who is maintaining a home for his wife and minor child or children would also have to file a return although in each instance no tax would have to be paid.

A husband and wife are still permitted to file either joint or separate returns. However, in every such instance where there are separate incomes a mathematical problem is presented and a decision must be reached as to which is the more economical. In making this decision, bear in mind that in joint returns the contributions, losses et cetera of one party may be used to offset the gains of the other. On the other hand, a joint return may bring one in the upper surtax brackets and result in a higher tax than would have been paid if individual returns were filed.

As an illustration of the application of the

Act let us consider the potential report of a married physician, living with his wife, maintaining a household, who has two dependent children and whose items of income and deductions are as follows:

<i>Income</i>	
Income from profession (earned income) .....	\$6,000.00
Dividends .....	600.00
Rents and royalties.....	780.00
Fully taxable interest.....	100.00
Gross income .....	\$7,480.00
<i>Deductions</i>	
Taxes .....	\$ 482.00
Interest paid .....	82.00
Losses from fire, theft, etc. (not capital losses).....	320.00
Bad debts .....	100.00
Contributions .....	110.00
Total deductions .....	1,094.00
Net income .....	\$6,386.00
Credits against net income for surtax purposes:	
Personal exemption .....	\$1,500.00
Credit for dependents.....	800.00
	2,300.00
Surtax net income.....	\$4,086.00
Surtax (see surtax tables below)	\$311.18
* * *	
Net income .....	\$6,386.00
Credits against net income for normal tax purposes:	
Personal exemption .....	\$1,500.00
Credit for dependents.....	800.00
Earned income credit (10% of either earned income or net income, whichever is less) .....	600.00
	2,900.00
Normal tax net income...	\$3,486.00
Normal tax (4% of \$3,486.00)....	139.44
Total normal and surtax.....	\$450.62

Note that the amount subject to surtax is greater than that subject to normal tax. This is true because the earned income credit is one of the items not allowed as a deduction for surtax purposes.

It is possible under the Act to have a situation where the taxpayer will not be required to pay a normal tax but nevertheless must pay a surtax. For example, where a married man

## TAXES

with one dependent has an exemption of \$1,900.00 and has an earned income of \$2,100.00, his earned income credit added to his exemptions would total more than his income and he would therefore have no normal tax to pay; but since his earned income credit of \$210.00 is not allowable for surtax purposes, he would be entitled to only \$1,900.00 in exemptions and would therefore be required to pay a surtax on \$200.00 which would amount to \$12.00.

### Surtax Tables

Surtax tables as set up under the Act start at 6 per cent with the rate increasing rather abruptly. The rates up to and including \$32,000.00 are as follows:

If the surtax net income is:		The surtax shall be:	
Not over \$2,000.00.....	6	per cent of the surtax net income	
Over 2,000.00 but not over 4,000.00.....	\$	120.00 plus 9 per cent of excess over \$ 2,000.00	
Over 4,000.00 but not over 6,000.00.....		300.00 plus 13 per cent of excess over 4,000.00	
Over 6,000.00 but not over 8,000.00.....		560.00 plus 17 per cent of excess over 6,000.00	
Over 8,000.00 but not over 10,000.00.....		900.00 plus 21 per cent of excess over 8,000.00	
Over 10,000.00 but not over 12,000.00.....		1,320.00 plus 25 per cent of excess over 10,000.00	
Over 12,000.00 but not over 14,000.00.....		1,820.00 plus 29 per cent of excess over 12,000.00	
Over 14,000.00 but not over 16,000.00.....		2,400.00 plus 32 per cent of excess over 14,000.00	
Over 16,000.00 but not over 18,000.00.....		3,040.00 plus 35 per cent of excess over 16,000.00	
Over 18,000.00 but not over 20,000.00.....		3,740.00 plus 38 per cent of excess over 18,000.00	
Over 20,000.00 but not over 22,000.00.....		4,500.00 plus 41 per cent of excess over 20,000.00	
Over 22,000.00 but not over 26,000.00.....		5,320.00 plus 44 per cent of excess over 22,000.00	
Over 26,000.00 but not over 32,000.00.....		7,080.00 plus 47 per cent of excess over 26,000.00	

These tables continue up to \$5,000,000.00 and those persons having an income over that figure are required to pay a surtax of \$3,723,780.00 plus 77 per cent of the excess over \$5,000,000.00.

### The Optional Return

The optional return was designed to simplify the filing of returns for the thousands of new taxpayers this year. While it is an arbitrary method, it is assumed that the use of this return will result in the filing of fewer falsified returns, as the deduction allowed, in addition to the personal exemptions and the credit for dependents, is approximately 10 per cent.

The use of this form is restricted to those having a gross income of \$3,000.00 or less and whose income "consists wholly of one or more of the following: Salary, wages, compensation for personal services, dividends, interest, rent, annuities, or royalties." In the tables accompanying this form, a specific tax is listed for gross incomes from \$750.00 to \$3,000.00 with each bracket of \$25.00 paying a different tax.

A professional man would not be permitted to deduct any items of expense, were he to use

the Optional Return, so a thorough explanation here would merely waste valuable space. However, I do wish to point out that should a husband and wife have separate incomes, one would be permitted to file the regular form while the other filed the optional form. If this were done, each person would be considered as a single person and would therefore be entitled to a personal exemption. The credit for dependents would then be taken by the person providing support for same.

### Capital Assets

The law as to the acquisition and disposition of Capital Assets has not been changed. However, there has been some confusion as to the appli-

cation of short term losses and for that reason the procedure is deemed worthy of comment. The rule on short term losses is that they may be deducted to the extent of short term gains for the same year. If one's short term losses exceeded his short term gains in the 1940 return, such losses may be deducted from the short term gains in 1941 and such deduction is only limited by the taxpayer's 1941 net income.

It might be well to point out that among the numerous suggested changes, several were proposed affecting Capital Assets. While no definite information is available, it is assumed by many that there will be changes in the manner in which profits on "long term" and "short term" gains are taxed. With this in mind, a thorough study of one's securities is indicated. The taxpayer should prepare at this time to take advantage of those deductions which might not be available in future. Examine the advisability of

disposing of those securities which are about to pass from one time bracket to another. It may be advisable to dispose of certain assets at a profit to offset certain losses incurred during the year. As it is possible that the new tax bill may not permit the deduction of short term losses incurred in the preceding year, it might be advisable to dispose of certain assets at a profit in order to absorb losses you have incurred during this year. Action must be taken before the end of the taxable year so that full advantage may be obtained. Adversely, if one is planning certain decorations or repairs which would come under the heading of "Business deductions" it might be well to wait until next year. Naturally, the same would hold true for business expenses.

### Deductions

In discussing deductions I assume that the taxpayer is familiar with the fact that the usual professional expenses are deductible. These are many. To enumerate them would take several paragraphs.

While equipment is generally considered as a capital asset and the taxpayer is only permitted to take depreciation on it, this is not true of those numerous items which must be constantly replaced. Magazines in the waiting room, malpractice insurance, dues in professional

societies, expense of attending professional conventions, scientific journals, and the cost of maintenance of an automobile to the extent to which it is used in carrying on a profession are items of business deduction. Contrasted to the rule that business expenses are deductible, the Treasury Department has ruled that the cost of uniforms of surgeons and nurses as well as their cost of laundering, is not deductible!

A good rule to follow in deciding deductions for business expense: If the expense is incurred because it is essential to a profession or if it is required or expected of the physician in order that he may receive his compensation, it is deductible. However, if it is primarily connected with one's living, family or personal welfare, regardless of whether it may subsequently benefit one in his profession, it may not be deducted.

A doctor who uses part of his home as an office may deduct a proportionate share of the expense for heat, light, repairs, depreciation, insurance, cleaning service, et cetera. This apportionment may be on the basis of use, ratio of rooms used, or ratio of area. As no definite rule has been set, the merits in each case will govern.

717 Ford Building,  
Detroit, Michigan

*(Part II will appear in the January issue)*

## ADVANCED COURSE IN SURGICAL ANATOMY at the UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

Second Semester—February 12 to June 4, 1942. Thursday, 1:00 to 10:00 P. M.  
each week. Professor Rollo E. McCotter.

Dissection of specific regions of the body to refresh previous knowledge and as preparation for surgical specialties or investigative work. If time permits and suitable material is available, the study may be extended to the microscopical and developmental anatomy of the region. Informal lecture the first part of the afternoon followed by dissection of the part under consideration. Graduate or postgraduate credit can be arranged. Fee \$25.

For further information, address:

Department of Postgraduate Medicine  
University of Michigan  
Ann Arbor, Michigan

## CORONER ACTION REQUIRED IN ALL CASES NOT SEEN BY PHYSICIAN DURING THIRTY-SIX HOURS PRECEDING DEATH

### Attorney General's Opinion to State Board of Embalmers and Funeral Directors

We have your recent letter in which you ask for a construction and clarification of the meaning of Section 19, Chapter XIII, of the Code of Criminal Procedure (Act 175, P.A. 1927; Section 17421, C. L. 1929; Section 28.1187, Mich. Stat. Ann.) which reads:

"It shall be the duty of any physician and of any person in charge of any hospital or institution, or of any person who shall have first knowledge of the death of any person who shall have died suddenly, accidentally, violently or as the result of any suspicious circumstances or without medical attendance up to and including at least thirty-six hours prior to the hour of death, or in any case of death due to what is commonly known as an abortion, whether self-induced or otherwise, to immediately notify the coroner of the death. It shall be unlawful for any undertaker, embalmer or other person to remove any body from the place where such death occurred, or to prepare same for burial or shipment, without first notifying the coroner and receiving permission to remove the body."

We refer you to a former opinion of this department (1933-34 O.A.G. 166) which discusses the history and purpose of this statute in detail. The apparent purpose of the statute is to assist in the discovery of crime resulting in death and to provide a method for determining the cause of death in all doubtful cases. Without repeating what was said in that opinion, we concur in the conclusion that this statute requires the action of a coroner in all cases of death where a physician has not seen the deceased during the last thirty-six hours preceding the hour of death.

We also direct your attention to Section 8 of Act 343, P. A. 1925 (Section 6580, C. L. 1929; Section 14.228 Mich. Stat. Ann.) which provides in part:

"In case of any death occurring without medical attendance it shall be the duty of the undertaker or person acting as such to notify one of the county coroners, or a justice of the peace acting as coroner, who shall investigate or hold an inquest as the circumstances require and shall certify as to the cause of such death on the death certificate and shall sign the same officially, as coroner or acting coroner. \* \* \*"

You comment that:

"An extremely large proportion of deaths are due to such chronic disorders as cancer, heart ailments, et cetera. In such cases where medical attention has been provided and adequate diagnosis has been made, it is seldom that the physician is in actual physical attendance during the thirty-six hours immediately preceding death. Does this law require that such cases shall be referred to a coroner? We feel that they should not."

We cannot concur in your conclusion as it seems possible that in some cases of this sort some other cause of death might have intervened within the final thirty-six hours of the decedent's lifetime; for example, one suffering from such an ailment might be the victim of euthanasia, might commit suicide, or might die of some cause entirely unrelated to the previously diagnosed ailment. The fundamental purpose of the statute in question requires the action of a coroner in such cases so as to ascertain definitely the cause of death and aid in detecting crime.

You further comment:

"There is ample reason to believe that a physician whose first call occurs within this thirty-six hour period may not have sufficient time or information to make a proper diagnosis and, therefore, should be required to refer the case to a coroner."

In such cases the statute permits, and indeed in some cases requires, the attending physician to notify the coroner.

You present this further question:

"Whether a person who died directly as the result of an accident, but a year after such accident actually occurred, would be considered to have died 'accidentally' within the meaning of the above act."

The word "accidentally" must be read in connection with the preceding language and meaning must be given to the entire phrase "any person who shall have died suddenly, accidentally, or violently." Reading it in this way, it is clear that it does not refer to a person who dies as a *result* of an accident after the lapse of a year or any other extended period of time. In the immediately following phrase, the statute refers to "the result of any suspicious circumstances," and had the legislature intended the meaning, it no doubt would have used the phrase "the result of an accident."

It is our opinion that the word "accidentally" must be given its usual dictionary meaning of a sudden and unforeseen event.

Very truly yours,

HERBERT J. RUSHTON  
*Attorney General.*

No. 20313 of  
July 7, 1941.

DECEMBER, 1941

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## YOU AND YOUR BUSINESS



### THE STATE OF WASHINGTON SOLVES ITS STATE-MEDICINE THREAT

According to *Northwest Medicine*, a limited form of state medicine was inaugurated in the state of Washington last autumn by the passage of an initiative bill by a majority of 100,000 votes favoring an old-age pension measure which became effective April 1. This bill provides a pension of \$40 per month for all citizens who have attained the age of 65; one section of the bill provides for free choice of doctor and dentist from legally-qualified practitioners. The setup places the medical and dental care under a State Medical-Dental Board, including four physicians, two dentists and one nurse, with a local board in each of the thirty-nine counties comprising two physicians, one dentist and a representative of the County Welfare Department.

"When the actual care of patients came under consideration," according to *Northwest Medicine*, "there was only one available means of dispensing this service. It was realized that the existing Medical Service Bureaus, with their experience standing over a period of years, could immediately administer the new service, and the care was placed under these organizations, thus eliminating lay supervision of medical service which has been a threatened menace whenever state medicine has been under consideration."

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MSMS Convention, September 22, 23, 24, 25, 1942  
—Grand Rapids—

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### ANNUAL COUNTY SECRETARIES' CONFERENCE

The conference of county medical society secretaries will be held at the Olds Hotel, Lansing, Sunday, January 25, 10:30 a.m. to 4:00 p.m.

As in the past, this conference will become a joint meeting, in the afternoon, with the state and county health officers of Michigan.

An unusually interesting program is being developed, including a first-hand account of civilian defense in England by Chief Daniel Deasy of the New York Fire Department, now assigned to the Office of Civilian Defense, Washington, D. C.

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All members of the Michigan State Medical Society will be welcomed at the County Secretaries' Conference; particularly, the presidents and secretaries of county medical societies are urged to attend.

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MSMS Convention, September 22, 23, 24, 25, 1942  
—Grand Rapids—

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### APPRECIATION TO MICHIGAN LEGISLATURE AND THE GOVERNOR

The House of Delegates of the Michigan State Medical Society unanimously adopted the following resolution at the 76th Annual Meeting of the State Society in Grand Rapids:

RESOLVED, That the House of Delegates of the Michigan State Medical Society, in session September 16, 1941, place on its minutes an expression of appreciation to the members and the officers of the Michigan Legislature, and to His Excellency, The Governor, for the courteous reception extended to the representatives of the medical profession and for the thoughtful consideration they have given medical and public health measures that have come before them this year.

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MSMS Convention, September 22, 23, 24, 25, 1942  
—Grand Rapids—

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### "ADVANCED FIRST-AID FOR CIVILIAN DEFENSE"

An informative brochure with the above title issued by the American Red Cross is obtainable, together with a copy of "Emergency Medical Service for Civilian Defense," by writing the Office of Civilian Defense, Washington, D. C., attention of George Baehr, M.D., Chief Medical Officer. No charge is made for these booklets.

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MSMS Convention, September 22, 23, 24, 25, 1942  
—Grand Rapids—

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### KEEPING OUT OF TROUBLE

Not every doctor . . . who gets tangled up with the law deserves to be sued. One of the best ways for a doctor to keep out of trouble is to see to it very carefully that he does nothing which brings him within the scope of those who merit

JOUR. M.S.M.S.

damage suits against them, for if he is careful to observe this precaution he is likely to be rewarded with a long and honorable career in the practice of medicine without the humiliation, embarrassment and (sometimes) great loss occasioned by a malpractice suit.

*Humphreys Springstun, of the Detroit Bar. Doctors and Juries. P. Blakiston's Son and Co., Inc. 1935.*

MSMS Convention, September 22, 23, 24, 25, 1942  
—Grand Rapids—

### EMERGENCY NEEDS FOR NARCOTICS

The Bureau of Narcotics, Washington, D. C., urges physicians to keep their narcotic purchases to a minimum. If a doctor's average use is 100 tablets a year, the Bureau suggests that he do not keep 500 on hand, as all reserve stocks must be readily available for defense purposes.

While no shortage of narcotics is to be feared, excessive buying and over-stocking by practitioners and hospitals should be avoided, according to the Bureau. The importance of keeping the country's reserve supplies of narcotics in the hands of manufacturers and wholesale dealers, where they are available for distribution to those localities in which they may be most needed, is self-evident. Drugs which have passed on to the dispensing groups of registrants (practitioners and hospitals) become "frozen" in that their use has become restricted to the particular locality and they are no longer available for distribution to other areas where emergency needs may arise.

MSMS Convention, September 22, 23, 24, 25, 1942  
—Grand Rapids—

### FEDERAL GRANT AIDS PUBLIC-HEALTH NURSING

To aid in training graduate nurses specializing in public-health nursing, Mrs. Dorothy Stoddard, who for the past three years has served as a supervising nurse in Eaton County under the W. K. Kellogg Foundation plan, has been assigned to the staff of the department of nursing at Wayne University for one year under terms of a grant to Wayne from the Surgeon-General of the United States.

Her appointment is part of a general program, aided by the Surgeon-General's department, to expand Detroit's nurse-training facilities to aid the defense program. Sums totaling \$52,190 are being administered by Wayne under the program.

Mrs. Stoddard, a graduate of the University of Minnesota School of Nursing and of Columbia University, will develop new field-work facilities for public-health nursing students, advise students in various problems, and coordinate field experience with the University program.

DECEMBER, 1941

Say you saw it in the Journal of the Michigan State Medical Society



## Did you know Johnnie Walker is a duet?

Johnnie Walker *has* to be two people. For the friendly gentleman identifies both 12-year-old Black Label and 8-year-old Red Label Scotch whisky. Each has the smooth, friendly flavour that brings a special feeling of satisfaction to your taste. You'll like mellow Johnnie Walker, from the very first sip.

BORN 1820 . . .  
still going strong



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## MICHIGAN'S DEPARTMENT OF HEALTH

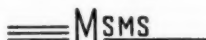
HENRY A. MOYER, M.D., Commissioner, Lansing, Michigan

### SMALLPOX OUTBREAK EXPOSES INDUCTION CENTER

Smallpox traced to a Port Huron case resulted in widespread exposures in Lapeer, St. Clair and possibly other counties in October. One patient was a rejected draftee who exposed the Army induction station in Detroit. Another was a postmaster, others were school children and factory workers.

When the case of the rejected draftee was reported after the State Health Department had been asked to investigate reports of smallpox at Allentown in St. Clair County, Selective Service sent warnings to reception stations at Fort Custer and Camp Grant. Out of 276 men in the Detroit induction station on October 16, 203 were accepted and sixty-two were rejected. These men came from thirteen draft boards in St. Clair, Oakland, Washtenaw and Wayne counties. Local health officers notified the sixty-two men of the exposure, offering vaccination and ordering quarantine where necessary.

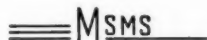
Mass vaccinations were provided in some Thumb communities as a result of the outbreak.



### 1941 BIRTHS SET NEW RECORD

Births in Michigan will exceed 100,000 for an all-time record this year. State Health Department figures indicate a total of 107,000 compared with the 1927 record of 99,940.

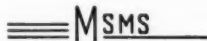
Last year, Michigan births totaled 99,106 and infant deaths were slightly more than 4,000. In spite of the increase in the number of births this year, the number of infant deaths will probably be only a little more than the 1940 total. Willingness of more mothers to visit their doctors early in pregnancy is lowering the number of infant deaths. In 1930, when the number of births was about the same as the 1940 total, the number of infant deaths was greater by more than 2,000.



### KELLOGG GRANT AIDS VIRUS RESEARCH

Virus research carried on in the Michigan Department of Health laboratories will be aided by new mechanical and electrical apparatus which will separate pure virus. The equipment will be purchased on a \$7,000 grant from the W. K. Kellogg Foundation and will include an air-driven ultracentrifuge and an electrophoresis apparatus.

Under the terms of the Kellogg grant, investigations of diarrhea of newborn infants will be one of the first studies carried on when the specially-built equipment is ready for use.



### NEW WATER SUPPLY PROMPTS DENTAL SURVEY IN ESCANABA

Escanaba's change of water supply from a bay of Lake Michigan to new deep wells may mean a future reduction in dental decay among the city's children.

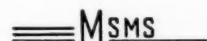
The well water contains five-tenths of one part of

fluorides per million parts of water. For this reason, a long-time survey is being undertaken to show the prevalence of tooth decay in children who have known only the old water supply, which is free of fluorides, and by comparison the prevalence of decay in children who use only the new well water. The survey is being made by dentists from the United States Public Health Service, the University of Michigan School of Dentistry and the Michigan Department of Health.

The survey will be similar to one recently made in eight suburbs of Chicago where it was found that children living in five communities where the water supply contained very small amounts of fluorides had only a half or third as many cavities in their teeth as children in the communities taking their water from Lake Michigan which is free from fluorine. Nearly 3,000 children from 12 to 14 years old were examined.

The Escanaba study is regarded as an ideal experiment. In the same town and in the same families, it will allow a comparison of dental health in children who have never had fluorine in their drinking water, and in children who have never known any other drinking water but the new supply with fluorine in it.

Studies have shown that the effect of the fluorides (or something associated with them) occurs only when the teeth are being formed—from birth to eight years for all teeth except wisdom teeth and up to 14 years of age for the wisdom teeth. Adults starting to use the water are not affected, but when once built up in children, the protection in the teeth seems to be lasting.



### WHOOPIING COUGH HIGHEST IN FIVE YEARS

Whooping cough is more prevalent in Michigan now than it has been in the last five years and parents are being urged to have their family physician give vaccine protection to babies and small children.

## Forgotten Charges...??

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## DAILY LOG



## ★ COUNTY AND PERSONAL ACTIVITIES ★

**100 Per Cent Club for 1942**—Muskegon County has certified 1942 dues for all of its 81 members. Congratulations to Muskegon County.

**The Michigan Society for Crippled Children, Inc.**, held its 20th Annual Convention in Saginaw on November 6 to 8, 1941. L. Fernald Foster, M.D., Bay City, Secretary of the Michigan State Medical Society, was on the program discussing "Camps for Crippled Children."

**The Dr. Max Ballin Memorial Lectures** (Ninth) were held on Wednesday, November 26, 1941, at the Detroit Institute of Arts. "Disturbances of Physiologic Function in Pancreatitis and Their Recognition" was presented by Mandred W. Comfort, M.D., Rochester, Minnesota; and "Surgical Aspects of Acute Pancreatitis" by Robert Elman, M.D., St Louis, Missouri.

**Michigan representatives** to the American Medical Association Secretaries' Conference of November 14-15 were Henry R. Carstens, M.D., President; A. S. Brunk, M.D., Chairman of The Council; L. Fernald Foster, M.D., Secretary; Roy Herbert Holmes, M.D., Editor; Wm. J. Burns, Executive Secretary; and J. L. Leet, Assistant Executive Secretary.

**"Heroes in Medicine,"** a dramatized radio program, is being recorded under the auspices of the Radio Committee of the Michigan State Medical Society and

will be distributed soon to all out-state radio stations cooperating with the Committee this year in presenting medical broadcasts. This interesting and progressive change in the radio program sponsored by the MSMS Radio Committee should insure a large listening audience throughout the state.

**Liberalization** of Civil Service Examinations for nurses has been announced by the United States Civil Service Commission. Persons over the age limit and those who cannot meet the physical requirements may apply for the examination if they meet all other requirements of the announcement. Persons applying under these provisions, if found otherwise eligible, may be appointed for temporary duty ONLY, for the duration of the emergency in the absence of qualified eligibles.

**Urology Award**—The American Urological Association offers an annual award "not to exceed \$500.00" for an essay (or essays) on the result of some specific clinical or laboratory research in urology. The amount of the prize is based on the merits of the work presented, and if the committee on Scientific Research deem none of the offerings worthy, no award will be made. Competitors shall be limited to residents in urology in recognized hospitals and to urologists who have been in such specific practice for not more than five years. Essays shall be in the hands of the Secretary, Clyde L. Deming, M.D., 789 Howard Avenue, New Haven, Connecticut, on or before April 1, 1942.

## *For the local Treatment of Acute Anterior Urethritis*

(DUE TO NEISSERIA GONORRHEAE)

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A complete technique of treatment and literature will be sent upon request

\*Silver Picrate is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble trituration for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph., Gon. & Ven. Dis., 23, 201 (March), 1939.

**JOHN WYETH & BROTHER, INCORPORATED, PHILADELPHIA**

A. C. Furstenberg, M.D., Ann Arbor, is author of "The Parotid Gland" which appeared in *The Journal of the American Medical Association* issue of November 8, 1941.

"The Surgical Treatment of Hypertension: II. Comparison of Mortality Following Operation with That of the Wagener-Keith Medically Treated Control Series" is the title of an article appearing in the *JAMA* issue of November 1, 1941, by Ward Wilson Woods, M.D., and Max Minor Peet, M.D., Ann Arbor.

\* \* \*

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DePuy Manufacturing Company, Warsaw, Indiana

The above ten firms were exhibitors at the 1941 Convention of the Michigan State Medical Society and helped make possible for your enjoyment one of the outstanding state medical meetings in the country. Remember your friends when you have need of equipment, medical supplies, appliances or service.

\* \* \*

Mr. Charles H. Swift, chairman of the board of Swift & Co., recently announced the establishment of a series of fellowships for research in nutrition. The fellowships provide for special research to be undertaken in laboratories of universities and medical schools with funds which the company has set aside as grants in aid, beginning November 1, 1941. The fellowships will be for one year but may be renewed where the project warrants it. Any fundamental study of the nutritive properties of food or the application of such information to improvement of the American diet and health will be eligible for consideration for a grant, according to Dr. R. C. Newton, vice-president in charge of the company's research laboratories, who will coordinate the program.

\* \* \*

The Michigan Pathological Society held its October meeting in Detroit on October 18, 1941, at Wayne University College of Medicine and at Receiving Hospital. The program consisted of a seminar on "Primary Tumors of the Brain" conducted by Gabriel Steiner, M.D., Professor of Neurology and Neuropathology at Wayne University College of Medicine. Eighteen typical cases of brain tumor with histories, operative and autopsy findings were presented by Doctor Steiner. Forty-seven physicians were in attendance.

The Annual Meeting of the Society will be held in December at the University Hospital, Ann Arbor, where the Society will be the guests of C. V. Weller, M.D., and his staff in the Pathological Department. The program will consist of the showing of a motion picture recently taken by W. M. German, M.D., on his trip through South America, which is entitled "Columbia South of Panama." "Problem Cases" will also be discussed by members of the Society.

\* \* \*

#### CONVENTION ECHOES

2,117 persons were registered at the 76th Annual Meeting of the Michigan State Medical Society (not including the members of the Woman's Auxiliary).

Physician-members .....	1,216
Guests (mostly M.D.'s from other states) .....	463
Interns and Residents .....	154
Exhibitors .....	284

GRAND TOTAL

2,117

The 1,216 members of the MSMS who registered at the Grand Rapids Convention represented the following specialties, according to a breakdown of the

DECEMBER, 1941



Main Entrance

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Nervous and Mental Diseases  
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\$5,000.00 ACCIDENTAL DEATH	For
\$25.00 weekly indemnity, accident and sickness	\$32.00 per year
\$10,000.00 ACCIDENTAL DEATH	For
\$50.00 weekly indemnity, accident and sickness	\$64.00 per year
\$15,000.00 ACCIDENTAL DEATH	For
\$75.00 weekly indemnity, accident and sickness	\$96.00 per year

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registration cards: General Medicine: 413; Surgery: 204; Obstetrics and Gynecology: 79; Pediatrics: 42; Eye, Ear, Nose and Throat: 89; Dermatology: 16; Radiology, Anesthesia and Pathology: 44; and unclassified: 329.

Over 200 office secretaries of members of the Michigan State Medical Society attended the Symposium on the Business side of Medicine, held in Grand Rapids September 16.

Miss Winona Kullgren of Muskegon, Secretary to Leland E. Holly, M.D., was the lucky winner of the attendance prize.

Governor M. D. Van Wagoner was honor guest at the Smoker of the Michigan State Medical Society held in the Pantlind Hotel Ballroom, September 18.

## CORRESPONDENCE

Michigan State Medical Society

Lansing, Michigan

Dear Secretary Foster:

A letter from Douglas, Barbour, Desenberg and Purdy under date of August 21, 1941, apprising me of my being released from law suit, has relieved me of much anxiety of the possible outcome and I appreciate greatly the protection afforded me by our Society.

I am more than ever convinced of the great advantages derived from professional association in organized effort of all groups to be of benefit to their members.

Sincerely,

R. MILTON RICHARDS, M.D.  
Detroit.

Oct. 16, 1941.

To the Michigan State Medical Society.

Gentlemen:

At the request of the Board of Directors of the Kent County Medical Society, I am writing to commend the State Society and its committees which made the recent State Medical Convention such a decided success.

We physicians of Grand Rapids appreciate having the Convention in our city, and many of us hope the Council of the Michigan State Medical Society decides to return to Grand Rapids and that the Kent County Medical Society may play a greater part in helping your committee on arrangements and entertainment.

Sincerely,

FRANK DORAN, M.D., Secretary  
Grand Rapids.

Oct. 17, 1941

Secretary, MSMS

Lansing, Mich.

Dear Doctor:

I wish and am indeed very happy to express my appreciation to the MSMS for the very real service it has given me. It is very gratifying, to know that someone is "batting" for you when one is forced to the side lines.

I am sure that if the few doctors who are not members of the MSMS knew what they were missing, all the king's horses could not keep them out of the MSMS.

Thank you very much for all you have done for me.

S. M. LEWIS, M.D.  
Ferndale.

Oct. 21, 1941.

JOUR. M.S.M.S.

## IN MEMORIAM

**L. F. Lavery** of Bay City was born in Bay City, Michigan, in 1895 and was graduated from Harvard Medical School in 1927. Breaking into his medical education, he left school during the World War to be a pilot in the naval air corps. Following the war he finished at Harvard and later interned at the Santiago County Hospital, California. He returned to Bay City last spring from San Clemente, California, where he had been practicing. Doctor Lavery met his tragic death in an automobile accident on October 30, 1941.

**Frederick W. Munro** of Detroit was born in Toronto, Ontario, June 11, 1899, and was graduated from the University of Toronto in 1924. During 1924 and 1925 Dr. Munro interned at the Hospital for Sick Children in Toronto. Following residency, he spent one year at Long Island Hospital, Boston, and one year as resident in pediatrics at the hospital for sick children, Detroit. Since 1928 he practiced in Grosse Pointe and latterly in his own office building at 16840 Kercheval Avenue. He was a Diplomate of the American Board of Pediatrics, as well as being affiliated with many medical and civic organizations. Dr. Munro died September 15, 1941.

**Arthur E. Owen of Lansing** was born in Grand Blanc on October 6, 1883, and was graduated from the Wayne University Medical School in Detroit in 1907. Dr. Owen studied in London, Vienna and Berlin. In 1925 he went abroad for a second time and took post-graduate work at Paris and London. Dr. Owen was a captain in the medical corps during the World War, and was a major in the medical reserve corps. He was a member of the Michigan Commandery, Military Order of Foreign Wars. In Lansing, he was prominent in civic and fraternal affairs and was a fellow of the American College of Surgeons and a member of the Southern Michigan Triological Society. He died October 8, 1941.

## RESOLUTION TO ENCOURAGE MEDICAL COMMISSIONS

The following resolution, adopted by the MSMS Medical Preparedness Committee, was approved by the Executive Committee of The Council of the Michigan State Medical Society on November 13, 1941:

WHEREAS, A shortage of medical officers in the United States Army and other Services exists at the present time; and

WHEREAS, Younger doctors of medicine seem reluctant to apply for commissions in the United States Army and other Services; and

WHEREAS, The above conditions are due to certain inadequacies and inefficiencies which do not make the Service attractive; now therefore be it

RESOLVED, That, in order to encourage requests for medical commissions, in the United States Army and other Services, prompt consideration be given to the following important matters:

1. That certified medical specialists be given initial commissions, not lower than the rank of Major;
2. That more rapid advancement in rank be provided for medical officers;
3. That special ratings with higher pay schedules be provided for medical officers;
4. That doctors of medicine be restricted to medical work, eliminating nonprofessional duties;
5. That more efficient use be made of the services of present medical officers; i.e., limiting them to professional duties and keeping them sufficiently occupied therewith.

DECEMBER, 1941

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**MEDICINE**—Two Weeks' Intensive Course in Internal Medicine, and Two Weeks' Course in Gastro-Enterology will be offered twice during the year 1942, dates to be announced. One Month Course in Electrocardiography and Heart Disease every month, except December.

**FRACTURES & TRAUMATIC SURGERY**—Two Weeks' Intensive Course will be offered four times during the year 1942, dates to be announced. Informal Course available every week.

**GYNECOLOGY**—Two Weeks' Intensive Course will be offered four times during the year 1942, dates to be announced. Clinical and Diagnostic Courses every week.

**OBSTETRICS**—Two Weeks' Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.

**OTOLARYNGOLOGY**—Two Weeks' Intensive Course will be offered twice during the year 1942, dates to be announced. Clinical and Special Courses starting every week.

**OPHTHALMOLOGY**—Two Weeks' Intensive Course will be offered twice during the year 1942, dates to be announced. Informal Course every week.

**ROENTGENOLOGY**—Courses in X-ray Interpretation, Fluoroscopy, Deep X-ray Therapy every week. General, Intensive and Special Courses in All Branches of Medicine, Surgery and the Specialties.

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## READING NOTICES

### SCIENTISTS MEET ON APPLE RESEARCH

The first major conference ever held on apple-use research met in Washington on October 20, 1941. Dr. M. L. Wilson, chairman of the special committee on apples in the U. S. Department of Agriculture, presided. The purpose of the conference was to review the work done to date on apples and to map out a large scale program of future study and investigation. Dr. Ira A. Manville, director of the Nutrition Research Laboratory, University of Oregon Medical School, presented the apple research work he had conducted during the past five years.

Dr. Lydia Roberts of the University of Chicago, said "We feel that apples are one of the most valuable foods even though we may not be able to explain just why. Everything is to be gained from research and I urge that it be done."

Among the leading authorities in the field of nutrition and food research present, the Department of Agriculture was represented by Dr. Louise Stanley and members of the Bureau of Home Economics research staff; Dr. J. T. Jardine in charge of experiment stations; Dr. E. C. Auchter, chief of the Bureau of Plant Industry. Others who attended included Dr. L. A. Maynard of Cornell University, chairman of the Fruits Committee of the National Research Council, Dr. A. R. Olpin, director of the Research Foundation and Dr. J. H. Gourley, chief of Horticulture, Ohio State University.

### WHY MEAD, JOHNSON & COMPANY CO-OPERATES WITH THE COUNCIL

Voluntarily Mead Johnson & Company markets only Council-accepted products because they have faith in the principles for which the Council on Pharmacy and Chemistry (and the Council on Foods) stands.

They have witnessed the three decades during which the Council has brought order out of chaos in the pharmaceutical field. For over thirty years it has stood—alone and unafraid—between the medical profession and unprincipled makers of proprietary preparations.

The Council verifies the composition and analysis of products, and substantiates the claims of manufacturers. By standardizing nomenclature and disapproving therapeutically suggestive trade names, it discourages shotgun therapy and self-medication. It is the only body representing the medical profession that checks inaccurate and unwarranted claims on circulars and advertising as well as on packages and labels.

### "PETROLAGAR" NOW "PETROGALAR"

A change in the spelling of the name "Petrolagar" to "Petrogalar" has been announced by the Petrolagar Laboratories. The change is being made in both the product name and corporate name.

Company officials, while pointing out that the adoption of the new spelling does not affect the formula or quality of the product in any way, said that they considered the change advisable to avoid any possible misconception as to the nature of the product.

"Because it has never been the intention of the company to imply that agar-agar was used for any other purpose than as an emulsifying agent, the last syllable of the former name has been altered in favor of the new spelling," officials said.

Officials emphasized that no change has been made in

JOUR. M.S.M.S.

## PROFESSIONAL PROTECTION



### A DOCTOR SAYS:

*"Believe me when I say this was a nice Christmas present and lifted quite a worry off my mind. It was certainly a hard, long case to fight. The whole profession here feels that it was a victory for all."*

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the size of the package, price, or formulæ and that each of the five different types of the product will carry the new spelling "Petrogalar." The new corporate name is: Petrogalar Laboratories, Inc., and the address remains, 8134 McCormick Boulevard, Chicago, Illinois.

#### SCHERING TO MARKET SULFADIAZINE

Sulfadiazine which, according to Perrin Long, M.D., of Johns Hopkins University, is likely "to run sulfanilamide off the drug store shelves" as the drug of choice in the treatment of hemolytic streptococcus infections as well as in pneumonia, will be marketed by the Schering Corporation of Bloomfield, N. J. Schering has just introduced Sulamyd, sulfacetimide-Schering, for use in urinary tract infections.

Sulfadiazine (2-sulfanilamidopyrimidine) has been found less toxic than other anti-pneumococcic sulfonamides. Nausea and vomiting have occurred in only about 10 per cent of the many cases treated with the new drug. Higher blood concentrations are more easily attained and maintained after oral dosage and sulfadiazine readily penetrates cerebrospinal, ascitic and pleural fluids.

#### SOLUTION ADDED TO SQUIBB GROUP OF AMINOPHYLLINE PRODUCTS

To provide for all forms of administration of aminophylline, E. R. Squibb & Sons, New York, have added Solution Aminophylline Squibb to their previously introduced line of tablets and powder. The solution is supplied in 2 c.c. ampuls containing per c.c.  $3\frac{3}{4}$  grains (0.25 gram) of aminophylline in sterile aqueous solution for intramuscular injection; and 10 c.c. ampuls containing  $\frac{3}{8}$  grain (0.025 gram) per c.c. of aminophylline in sterile aqueous solution for intravenous injection.

Aminophylline (theophylline with ethylene diamine U.S.P. XI) is rapidly absorbed, producing prompt physiologic response. Recognized indications for the use of aminophylline are: as a diuretic and myocardial stimulant; in bronchial asthma; Cheyne-Stokes respiration; paroxysmal cardiac dyspnea; and for the relief of pain due to coronary sclerosis.

#### SQUIBB STILBESTROL RELEASED

After two years of clinical trial, during which time over a hundred papers were published reporting studies in which it was used, stilbestrol, manufactured by E. R. Squibb & Sons, New York, is now available for general distribution throughout the country. Stilbestrol is a synthetic estrogen possessing the physiologic properties of estrogenic substances derived from natural sources. Chemically, it is alpha, alpha'-diethyl-4, 4'-stilbenediol. It is also called diethylstilbestrol.

Stilbestrol orally has a ration of effectiveness to intramuscular injection much superior to that possessed by natural estrogens. It has another advantage over the natural estrogens in that it is considerably more economical.

Squibb Stilbestrol is supplied in three forms: (1) Compressed tablets, either uncoated or enteric coated, for oral administration; (2) stilbestrol in oil, for intramuscular injection; and (3) pessaries, for vaginal medication.

In common with other highly potent chemotherapeutic agents, stilbestrol should be used only by or under supervision of a physician. Literature describing its dosage, indications and precautions is available to physicians upon request.

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*Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.*

**NUTRITION IN HEALTH AND DISEASE.** By Lenna F. Cooper, B.S., M.A., M.H.E., Chief, Department of Nutrition, Montefiore Hospital, New York City; Formerly Food Director, University of Michigan; Dean of School of Home Economics, Battle Creek College; Supervising Dietitian, U. S. Army, 1918-1919; President, American Dietetic Association, 1937-1938; and, Edith M. Barber, B.S., M.S., Writer and Consultant, Food and Nutrition; Editor, Food Column, *New York Sun*; and Food Column, Bell Syndicate; Lecturer on History of Cookery, Teachers College, Columbia University; and, Helen S. Mitchell, B.A., Ph.D., Director of Nutrition on the Staff of the coordinator of Health, Welfare and Related Defense Activities, Federal Security Agency, and Research Professor of Nutrition, on Leave from Home Economics Division, Massachusetts State College. Eighth edition, completely revised and reset. 100 illustrations and 2 colored plates. Philadelphia: J. B. Lippincott Company, 1941. Price: \$3.50.

The eighth edition of this volume originally published in 1928 has been arranged to conform closely to "A Curriculum Diet for Schools of Nursing" published by the National League of Nursing Education. It is very complete and rather simply written.

—MSMS—

**THE PREMATURE INFANT.** Its Medical and Nursing Care. By Julius H. Hess, M.D., Professor and Head of the Department of Pediatrics, University of Illinois College of Medicine; Attending Pediatrician, Illinois Research and Educational Hospital, Cook County and Michael Reese Hospitals; and Evelyn C. Lundeen, R.N., Supervisor, Premature Infant Station, Sarah Morris Hospital, Chicago. 74 illustrations. Philadelphia: J. B. Lippincott Company, 1941. Price: \$3.50.

In greater than usual detail the handling of the premature infant is here discussed. The illustrations are well selected and the application of the material is practical. Considerable emphasis is placed upon the care of the premature infant in the home. The topography is excellent and the contents encyclopedic. It is suitable both for the physician and the advanced nurse.

—MSMS—

**PRINCIPALS OF MICROBIOLOGY.** By Francis E. Colien, B.S., M.S., Ph.D., F.A.P.H.A., Associate Professor of Bacteriology and Preventive Medicine in The Creighton University School of Medicine; Lecturer in Public Health and Preventive Medicine, Creighton Memorial, St. Joseph's Hospital School of Nursing, Omaha; Director of Laboratories, Health Department, City of Omaha; Major, Sanitary Division, United States Army Medical Reserve; Formerly Professor of Bacteriology and Preventive Medicine in the Central School of Nursing, Milwaukee; and, Ethel J. Odegard, R.N., A.B., M.A., Instructor in Sciences Applied to Nursing, College of Saint Teresa, Winona, Minnesota; Formerly Director of Nursing Education in the Central School of Nursing, Milwaukee; Education Director, Miami Valley Hospital School of Nursing, Dayton, Ohio. St. Louis: The C. V. Mosby Company, 1941. Price: \$3.00.

This is a teaching book for nurses which is arranged for the most part to meet the recommendations of the Curriculum Committee on Education of the National League of Nursing Education. It is very complete for this purpose and has many demonstrative cuts. The paper is green tinted. It is recommended for teaching purposes.

—MSMS—

**THE FOOT AND ANKLE.** Their Injuries, Diseases, Deformities and Disabilities. With Special Application to Military Practice. By Philip Lewin, M.D., F.A.C.S., Associate Professor of Bone and Joint Surgery, Northwestern University Medical School; Professor of Orthopedic Surgery, Post-graduate Medical School of Cook County Hospital; Attending Orthopedic Surgeon, Michael Reese Hospital, Chicago; Consulting Orthopedic Surgeon, Municipal Contagious Disease Hospital, Chicago; Formerly Major Medical Reserve Corps, United States Army. With 304 illustrations. Line drawings by Harold Laufman, M.D. Second edition. Philadelphia: Lea & Febiger, 1941. Price: \$9.00.

Because of the changing national and international

situations notable changes have been made in the second edition of the volume first published in 1940. These events made it imperative for the author to emphasize the military aspects of injuries, diseases, and disabilities of the foot and ankle. However, the foot and ankle diseases found in everyday practice have not been neglected. The typography is excellent and the illustrations well chosen. It is recommended for study and reference.

—MSMS—

**A MANUAL OF BANDAGING, STRAPPING, AND SPLINTING.** By Augustus Thorndike, Jr., M.D., F.A.C.S., Associate in Surgery, Harvard Medical School; Surgeon to the Department of Hygiene, Harvard University. Illustrated with 117 engravings. Philadelphia: Lea & Febiger, 1941. Price: \$1.50.

In a pocket manual the author presents in picture form the common types of bandages, straps and splints taught by the Harvard Medical School. Its pictorial system is advantageous for quick reference. In the foreword Elliott C. Cutler says, "To the young surgeon . . . let him remember that a neat dressing often bespeaks a good job beneath."

—MSMS—

**THE 1941 YEAR BOOK OF PUBLIC HEALTH.** Edited by J. C. Geiger, M.D., Dr.P.H., Director of Public Health City and County of San Francisco; Clinical Professor of Epidemiology, University of California; Clinical Professor of Preventive Medicine and Public Health, Stanford University School of Medicine; Lecturer in Preventive Medicine and Public Health, University of Southern California Medical School. Chicago: The Year Book Publishers, Inc., 1941. Price: \$3.00.

This follows the usual make-up of the other thirteen year books bringing in abstract form last year's printed reports on this subject—both the clinical material and laboratory work. A section on "Military Hygiene" holds prominence. The typography is good and the material is well arranged.

—MSMS—

**SULFANILAMIDE AND RELATED COMPOUNDS IN GENERAL PRACTICE.** By Wesley W. Spink, M.D., Associate Professor of Medicine, University of Minnesota Medical School. Chicago: The Year Book Publishers, Inc., 1941. Price: \$3.00.

For the average practitioner who is more or less completely confused on the use and abuse of the sulfonamides this monograph is of real practical value. The author begins with the historical development and after discussing the drugs themselves discusses their use in various diseases. The typography is good and the material is well arranged. It is recommended to the general practitioner.

—MSMS—

**ESSENTIALS OF GENERAL SURGERY.** By Wallace P. Ritchie, M.D., Clinical Assistant Professor, Department of Surgery, University of Minnesota Medical School. With 237 illustrations. St. Louis: The C. V. Mosby Company, 1941. Price: \$8.50.

"In general it reflects the attitude and practices of the Surgical Department of the University of Minnesota Medical School." This 813 page compendium of surgery provides a basic outline of general surgery and a review which would save time and energy for the practicing surgeon. The material is well arranged, the typography is good and it is recommended to the general practitioner for review.

—MSMS—

**DOCTOR COLWELL'S 1942 DAILY LOG.** Champaign: Colwell Publishing Company, 1941. Price: \$6.00.

For the doctor who wants a one-volume financial record this daily log is very simple to use and yet inclusive enough to furnish, at any time, complete financial data of one's practice. There is space allotted for almost every need of the general practitioner. The publishers claim a renewal rate of 90 to 95 per cent from year to year and renewals of this type of book should be its greatest recommendation.

**MICROBES WHICH HELP OR DESTROY US.** By Paul W. Allen, Ph.D., Professor of Bacteriology and Head of the Department, University of Tennessee; D. Frank Holtman, Ph.D., Associate Professor of Bacteriology, University of Tennessee; and Louise Allen McBee, M.S., Formerly Assistant in Bacteriology, University of Tennessee. St. Louis: The C. V. Mosby Company, 1941. Price: \$3.50.

This was written for your patient who needs to become "microbe conscious." It is interesting, well organized, and scientifically correct. The typography is excellent. It is printed on green tinted paper and well illustrated. The physician will find it of assistance in explaining the character of specific diseases to his patients. It is recommended for the intelligent patient.

—MSMS—

**CARDIAC CLINICS.** A Mayo Clinic Monograph. By Fredrick A. Willius, B.S., M.D., M.S. in Med., Head of Section of Cardiology, Mayo Clinic, and Professor of Medicine, Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota, Rochester, Minn. St. Louis: The C. V. Mosby Company, 1941. Price: \$4.00.

In this monograph Willius after discussing signs and symptoms of cardiac disease takes up various specific pathological conditions and discusses them by means of case reports. This method is indeed enlightening and aids in fixing the acquired knowledge. It is very readable but also valuable as a reference book and is recommended to the general practitioner who has a special interest in cardiac diseases.

—MSMS—

**OCCUPATIONAL DISEASES.** Diagnosis, Medicolegal Aspects, and Treatment. By Rutherford T. Johnstone, A.B., M.D., Director of the Department of Occupational Diseases, Golden State Hospital, Los Angeles, California; Formerly Assistant Professor of Medicine, University of Pittsburgh School of Medicine. Illustrated. Philadelphia and London: W. B. Saunders Company, 1941. Price: \$7.50.

This very well written and practical reference book for industrial physicians is of considerable value and interest to the general practitioner who should be interested in the relation of health to industry. The typography is excellent, the plates are well chosen, and the material is arranged for easy reference.

—MSMS—

**NEW AND NONOFFICIAL REMEDIES, 1941.** Containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1941. Cloth. Price, postpaid, \$1.50. Pp. 691—LXX. Chicago: American Medical Association, 1941.

"New and Nonofficial Remedies" is the book in which are described the medicinal preparations found by the Council on Pharmacy and Chemistry to be acceptable for the use of physicians. The book is cumulative; each year there are added the descriptions of products accepted during the foregoing year. Those taken off the market or found no longer worthy of continued acceptance are deleted. The book is at that time also revised to bring it up to date with the most recent medical thought. Until recent years the additions and deletions have about balanced. Recently, however, the bulk of the book has been increasing and thus year's volume represents the largest book of the more than thirty volumes that have been issued.

This year's new additions include the new sulfanilamide derivative, sulfathiazole, as well as sulfapyridine sodium; antipneumococcal rabbit serum of types I, II, III, V, VII and VIII; human convalescent measles serum and human convalescent scarlet fever serum; an staphylococcus antitoxin. The field of endocrinology is represented by the addition of chorionic gonadotropin (follutein). The addition of shark liver oil reflects the search for new sources of vitamins A and D caused by the cutting off of foreign cod liver oil. Other newly accepted preparations are ampules of camphor, digiloid and magnesium trisilicate.

The most extensive revision is represented by the rearrangement and amplification of the chapter, "Serums

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and Vaccines." This chapter is now prefaced by a helpful index, an innovation in N.N.R. The chapter, "Vitamins and Vitamin Preparations for Therapeutic and Prophylactic Use," has been revised to keep it abreast of the newer developments in this field. Here, too, we find something of an innovation in the systematic use of graphic chemical formulas. It is understood that this practice will be extended to other parts of the book in future editions. Careful perusal will reveal minor revisions in many parts of the book made in the interest of greater clarity and in the effort to keep the book thoroughly up to date.

### SALUTE TO THE WOMAN'S AUXILIARY

The quiet and modest way in which the Woman's Auxiliary works often obscures the value of their contributions both to organized medicine and to the community at large. This modesty is commendable, but it is time that The Medical Society recognized, and the public learned, of the highly effective work being done by the Woman's Auxiliary to The Medical Society of New Jersey. Our women are daily performing tasks which should be acknowledged by the community. It would be well if the County Auxiliaries sent to their local newspapers properly prepared releases telling the world what they are doing for public welfare.

From the public point of view the most conspicuous of the good works of the Auxiliary is their donation of gifts and money to worthy causes. Even a partial list of the beneficiaries of their efforts will surprise most of us. Thus, in the past year, the following agencies and individuals have received gifts, money or equipment from the Woman's Auxiliary.

Children's Homes, Visiting Nurses Association, British War Relief Association, Hospitals, Nurses' Homes, Red Cross, Widows and Orphans of Doctors, hospitalized ward patients, soldiers in camps in New Jersey, the Tuberculosis League, the Girl Scouts, Cancer Control organizations, libraries in need of blood transfusions, Y.W.C.A.'s, and the benevolent funds of the Medical Societies themselves.

The Auxiliaries of Atlantic, Burlington, Mercer, and perhaps other counties, have established funds to help worthy student nurses receive their professional education. This is philanthropy of the most constructive sort and it is an investment in human character. The special Blood Transfusion Fund of Ocean County is a unique and truly life-saving philanthropic project. The gift of food, recreational equipment and clothing to both British and American soldiers is a highly practical contribution to National Defense. Through special questionnaires, the Auxiliary will classify its members with reference to skills useful in National Defense programs, particularly in connection with evacuation and sabotage projects.

Even these imposing contributions, significant as they are, do not represent the totality of their services. The Auxiliary is of inestimable value to The Medical Society in dozens of other ways, too. They secure medical speakers and forums for the profession's public relations campaign. They promote friendly relationships among physicians' families, this work reaching a high-spot each year when they arrange for the banquet at the Annual Meeting of The Medical Society of New Jersey. They keep running the wheels of our Clinical Conferences by serving as hostesses, registrars and guides.

The proportion between the size of each County Medical Society and the much smaller size of the corresponding Auxiliary is strange. Perhaps doctors are at fault in not more fully activating their mothers, sisters and wives to joining the Auxiliary. If so, the fault should be corrected, for the Auxiliary is an indispensable member of our large New Jersey medical family. Incidentally, doctors are reminded of the fact that the JOURNAL contains an Auxiliary section which Auxiliary members are anxious to read. Make the JOURNAL accessible to your womenfolk.

We may never have said so before. If so, let it be said now. We know the full worth of the Auxiliary; we are grateful to them.—*The Journal of the Medical Society of New Jersey*, November, 1941.

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The Crippled Children Commission is paying bills for the medical care of afflicted and crippled children. However, it cannot pay for bills which it does not receive or which are unduly delayed. Therefore, contact the business office of your hospitals and ascertain if statements for the services of physicians are being sent, with the hospital bills, to the Crippled Children Commission in Lansing.

Suggest to your members that they render their bills promptly, through the hospital, to the Commissions, as bills over sixty days old cannot be honored for payment by the Commission.

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